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Database :
                                                                                                                                                          Post processing: Minimum Match 0%
                                                                                                                                                                                                 Maximum DB seq Length, 20000000000
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                                                                                                                                                                                                                                                        lotal number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                 Perfect score:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   OM protein - protein search, using sw model
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                                                                               PIR_6d:*
                                                                                                                      Listing tirst 45 symmarics
                                                                                                                                            Maximum Match 100%
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Gapop 10.0 , Gapext 0.5
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SHMMARIES

Rosalt		Areno *				
Z	Score		[⊷uqth]	441	ID	Description
	1804.5	76.7	÷1.9	ra ¦	869207	rascular endotbeli
ر.	211		1760	t ,	S08167	dr.
		9.0	242	1 .7	A41551	endot he
£-	191.5	8.1	190	to	852130	
Jħ.		æ. o	190	N	B44881	
J.	188.5	æ. c	190	N	A 35987	Œ
7		7.6	1.40	۲.	B40080	vascular endotheli
œ	174.5	7.4	214	ы	A11881	
٤	174		140	ر.	JEORAD	185K secretory pro
10	170.5	7.2	1187	N	T18355	hypothetical prote
1 1	164.5	7.0	188	7	JC4680	vascular endotheli
12	158.5	6.7	146	ΝŮ	857956	
- 1	157.5	6, . 7	120	Ν	A33787	vascular endotheli
44	152	ст. "Л	2871	N	A55624	fibrillin-l precur
15	150	5.4	-4×	N	1549530	16K vascular endot
<u>.</u>	144	6.1	3002	tű	A47221	fibrillin 1 procur
1.7	143.5	6.1	133	۰	B49530	muscular endotheli
<u>-</u>	141.5	6.0	3712	t-	\$18253	laminin alpha-1 ch
-119	141	6.0	144	N	A41236	placental growth t
20	141	6.0	1111	t-J	726972	hypothetical prote
21	140	5.4	1077	60	F#1146	probable cysteine-
22	140	5.9	5871	t.	A55567	fibrillia I - bovi
t.	18.5	5.9	0181		A32230	tenascin precursor
24	1 18	JI Z	817	د:	A42112	macin-like peptide
2.5	147.5	5.8	1104	2	69881	transcription fact
t _e	137.5	tn cc	100	ы	A49175	Motch B protein :
to 7	137.5	ហ ធ	1964	ر.	T09059	notch4 · mouse
r.	137	.л . В	207	tú	9:1679	wascular endothell
ĕ	136.5	υ œ	47.	t.	A56175	adhesive plague pr

A,Gene: GDB.VEGFC; VKP
A.Cross references: GDB:3890883: OMIM:601528
E:1 12/Eumain: signal sequence #status predicted <SIG>
E:13-102/Eumain: propeptide #status predicted <PRO>

C; Genetics:

ArStatus: preliminary: translated from CB/EMBL/DDBJ ArMolecule type: mRNA A.Residuea, 1:419 <MORY

A:Crass reterences: EMBL:U58111; NID:q1373426; PIEN:AAB02909.1; PID:q137427

1106 2 113938 1106 2 144598	5.5 647 2 A43902 5.5 1220 2 A55146	5.6 2531 2 A46019 5.6 158 2 A56125	5.6 1034 2 JC5598 5.6 1034 2 JC5598	5.7 810 2 T10756 5.6 2321 2 \$78549	5.7 1372 2 125933 5.7 2703 1 A24420	135 5.7 2150 2 132497 mm 135 5.7 2188 2 132497 mm 131.5 5.7 2218 2 A2160 mm
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	Library, May 1996		o the EMBI	submitted to t	subm:
PIDN:AAA85214.1: PID:q1150989	NID.41150988,	MBL.U43	A.Cross reterences. EMBL.U43142.	oss rete	A) Ord
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related protein (VRP): A ligand and	helial growth factor rela	Lar endot	on: Vascu	scriptic	A; Des
H.; Wood, W.I.	submitted to the EMBI Data Library Tocombor 1995	Yuan, J	Sray. A.:		R, Loo
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/EGF-C, is a ligand for the Fit	othelial growth tactor, N	mlar end	novel vaso	le: A	A;Tit
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A; Note: the nucleotide sequence was submitted to the EMBL Data Library, December 1999	ce was submitted to the B	ie sequei	nucleotio	e: the	A; Not
NA63907.1, FID:e221096; PID:qll	16. NID. 41177488, PIDN. CA	SMBL.X94	Mandas I	355 T 616	A, Cro
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A:Residues: [-1700 - PAU -
A:Cross references: GR:X52264; NID:q7057; PIDN:CAA36506.1; PID:q7058
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       C: Accession: 808167
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Overy Match 10.2%; Score 241; DH 2; Length 1700; Best Local Similarity 23.5%; Pred. No. 9.2e 10;
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75.7%; Pred. No. 9.8e
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C:Accession: A41551; C41551; B41551; A40454; B40454; C40454; A40079; A40080; J01463;
R:Houck, K.A.: Ferrara, N.; Wimer, J.: Cachianos, G.: Li, H.: Loung, D.W.
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J. Biol. Chem. 266, 11947-11954, 1991
A:Title: The human gene for vascular endothelial growth factor. Multiple protein form
A:Reforence number: A40454: MUID:91268072
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Arritle: The vascular endothelial growth factor family: identification of a fourth mo
                                                                                                                                   A;Fittle: Atts assestated Kapesi's sarroma celts in celture express vascular endotheli
                                                                                                                                                                                                                                  A;Cross-references: GB:M32977; NID:q181970; PIDN:AAA35789.1; PID:q181971
R;Weindel, K.; Marme, D.; Weich, H.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Science 246, 1306–1309, 1989
A;Title: Vascular endothelial growth factor is a secreted angiogenic mitogen
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A; Residues: 1:165,183:232 - KEC-
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Science 246, 1309-1312, 1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A; Molecule type: DNA
A; Residues: 1-141, 227-232 - 113-
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A; Residues: 1-140, 'N', 183 232 +T12+
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A; Accession: A41551
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N:Alternate names; vascular permeability factor
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                                        A:Reference number: JQ1463; MUID:92231879
A:Accession: JQ1463
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A; Cross-reterences: GB:M27281; NID:q340300; PIDN:AAA36807.1; PID:q340301
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A; Molecule type: mRNA
                                                                                                                                                                                                                                                                                                                                       A; Residues:
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A:Accession: A34492
A:Melecule type: protein
A:Melecules: 27-65,44-49, 'R':72-76,'0',78-81:59-71 <00N>
A:Besiloss: 27-65,44-49, 'R':72-76,'0',78-81:59-71 <00N>
C:Comment: The most common of several alternatively spl
C:cometics:
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A:Residues: 1-140,'N',227-242 (WEL)
A:Residues: 1-140,'N',227-242 (WEL)
A:Bapertimental source— A:DS:Rapost's sarchida cell
A:Bapertimental source— A:DS:Rapost's sarchida cell
A:Bapertimental source— Rolls: Monsell, R.; Siegel, N.; Hay
J. Biol. Chem. 244, 20017-20024 1983
J. Biol. Chem. 244, 20017-20024 1983
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A:Cross-releas: EMHCLX62588: NID:q37658: PIDN:CAA4447.1: PID:q37659
A:Experimental source, AIDS Expesits sarreser soft
A:Accession: JQ1464
                                                                                                                                                                                                       A:Molecule type: mRNA
A:Residues: 1-190 -SHA -
A:Pross-telerences: GB.Xd1380. Nib.d587579. FibN.CAA57143.1) Pib:g587560
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Blochim, Blophys, Acta 1260, 235-238, 1995
A:Ilitle: Bhelcoide Segaence and expression of the positive vascular verbihadial growth A:Reference number: S52130; Milli:95143284
A:Accession. $52130
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                                                                                                                                                                                                                                                                                                                                                                                                                     A:Status: preliminary
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C:Nato: 14-Jul 1945 #sequence_rectsion 2: [n] 1445 #fext_charge @5-Nec-1946
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Hest Local Similarity 24.2%, Fred. RJ. 1.86 08,
Matches 68; Conservative 33; Mismatches 105;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Comment: The most common of several afternatively spliced forms is VEGF 165
                                                         Query Match
      Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               300 PISCAPHKELDPASCOCMCKNELLPSSAGPNKEFDEEKOQC 340
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SACHDIETIADIEGEADELEATEKBSCANTWBCANDUNGERIEGEALEWWITWUTT 1008
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TVPLSHGPKPVTVSFANHTSCROMSKLDVYRQVHSTTRRSLPATQTQCHVANKTCPKNHV 247
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 - NTDSROKARMI - - - - - - EI NEPTOPO
8.1%;
27.5%;
Pred. No. 4.3e-07;
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      A35987
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A:Cross-references: GB:M95200; NID:q202350; PIDN:AAA40547.1; PID:q202351 A.Nata sequence extracted tram NCBI backtone (NCBIN:110665, NCBIP:110675) R:Rosenthal, R.A.; Megyesi, J.F.; Henzel, W.J.; Ferrara, N.; Folkman, J. Growth Factors 4, 54-59, 1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A:Experimental source: embryo A.Boleva, Nobin. 197622, NCBIP:107623) A.Bolev, Sequence cattacted from KDoleva, Nobin. (NCBIR:197622, NCBIP:107623) R.Claifey, K.F., Wilkison, W.O., Spiegelman, B.M.
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C:Date: 03-Feb-1994 #sequence_revision 03-Feb-1994 #text_change 05-Nov-1999
C:Arrossion: R44881: A43481; A41029
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A:Residues: 27-38 <ROS>
C:Keywords, ulternative splicing, angiogenesis; dimer; disulfide tund; glycoprotein;
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J. Biol. Chem. 267, 16317-16322, Prowth Pactor: Regulation by cell differentiation and
A;Fittle: Vascular endothelal growth factor: Regulation by cell differentiation and
A;Peference number: A43351; MUID:92355593
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Development 114, 521-532, 1992
A.Tilde, Engress-in, stress with the high mouth to the higher eality-onic angiowenes A.Reterence number: A44881) MGID:92274860
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A; Residues: [-1]; 'FP', Liv-lv: <CLA>
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A; Residues: 1-190 < BRE>
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158 Q1CACSCA .....
                                                                                                                                                                                                                                                                                                                                                                                                  176 STINY I SKELFILITYPILSHOFKFY TVSFANHTSOROMSKILDVYRGVHSI I KRSI, PAFQTQ - 244
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                                                                                  288 TTOOTVOKONVENTSOOBBKELLEASOOMSKNKLLESSOGENKEEDEEKOOO 340
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            95 PTEFENITMOIMFIKPHOGOBIGEMSELQHNKOBOPPKKDRARQ-------BNP7 142
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                            48 EVIKEMOV-YJRSYCKPIBITVOTEČEYPORTEXIFKPSOVPLMRCAGOONDFALEOVDI 96
                                                                                                                                                            ----KINIENH--
                                                                                                                                                                                                                                          CHVANETCHEMBUWANG COCILAGHEGESSHLOISISISISISINIA CHURCH - - - - - - - 1141 - 287
                                                                                                                                                                                                                                                                                                                    SESSITMOLMELK - - PHOSOH LEEMSELCHSBOBORPEKD-
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22.7%; Pred. No. 7.1
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        -NIDSKCKAROL-----ELNERTORC 185
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                                                                                                                                                            ---CEPCSERKKHLFVORP 157
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Actitie: Vascular endothelial growth factor is a secreted angiogenic mitogen.
Asket-rence number: A40080; MOTO: 90069608
A. Accession: 14500-1640
A. Morbeenic Type: mENA
A. Residues: I 1500-1640
A. Residues: I 1500-1640
A. Residues: T 1500-1640
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ACTille: Amilio deid and chNA sequences of a vascular endothelial cell mitogen that is in Asserterence number; A45987; MHD:90207249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    C.Species: Nos primigenrus tantus (cattle)
C;Date: No.Jun 1992 Mespecie revision 80 Jun 1992 Mext charge 05 Nos 1999
C;Accession: N400NU; N407NJ; A43255
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                                                                                                                               Collabor 15 Nov 1998 #sequence revision 16 Nov 1998 #text_charge 05 Nov 1999
E:100/Binding site: carbohydrate (Asn) (covalent) #status predicted
                                                                                       Fil 25/Domoin: Signal sequence #status predicted (SIG)
Fi2/ 199/Product: vascular endothelia) growth factor #status predicted MAT
                                                                                                                                                                                                                                                                                                      A:Reference number: A33254; MILD:89286596
A:Accession: A33254
A:Molecule type: protein
A:Resistancs: 27 (1 - FEF)
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A:Intle: Pituitary follicular cells secrete a novel heparin-binding growth factor speci
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Science 246, 1886 1885, 1985
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A:Molocule type: mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Caspecties: Rattus norvegious (Norway rat)
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                                                                                                                                                                                                                              Keywords: alternative splicing; glycoprotein
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22.1%; Pred. No. 7.
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Chery Match 7.6%: Score 179.5; DR 2: Length 190: Best Local Similarity 26.8%; Pred. No. 3.2e-06; Matches 49; Conservative 40; Mismatches 63; Indels 41
183 CRC 185
                                                                     290 000 292
                                                                                                                                                  139 ENPOGEOSERRKHLEVQDEQTORCSOK- ----
                                                                                                                                                                                                                           231 TQTQ HVANKTOFKNHVWNNQTOROLAQHDFOFSSHLGDSDTSEGFHTOGPNK (ELDEET 289
                                                                                                                                                                                                                                                                                                                                                                                     176 STNYTSKTLIFETTVEL----SHQPKPV-TVSFANRTSAMAMSKTHVYRQVHSTTIKRSLIA 230
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                   36 EVVKEMDV-YQRSFCKPTETLVDTFQEYPDETEFTFKPSCVPEMKCGGCCNDESLEC - 93
                                                                                                                                                                                                                                                                                                        - - - VPTEEFNITMQIMRIKPHQSQHIGEMSFLQHNKCECRFKKUKARQ
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C;Accession: A44881; C44881; A60932; S52136 R;Breier, G.; Albrecht, U.; Sterrer, S.; Risan, W. vascular endothelial growth factor-3 precursor - mouse N:Contains: vascular endothelial growth factor-2; vascular permeability factor A; Molecule type: mRNA A; Accession: A44881 A; Reference number: A44881; MOID: 92274860 A:Title: Expression of vascular endothelial growth factor during embryonic angiogenes Development 114, 521-532, 1992 C;Date: 03-Feb-1994 #sequence_revision 03-Feb 1994 #text_change 08 oct 1999 C;Species: Mas masculas (house mease) A44881

A; Accession A; Note: sequence extracted from NCH+ backbone (NCH+N:104677, NCH+P:104678) A: Experimental source: embryo A:Residnes: 1-214 < HKE-A:Cross references: GB:S:7052; NID:q249856; PHDN:AAB22252.1; PHD:q249857 (*44881

A,Cross references: GB:S48100; NID:q249860; PIDN:AAB22254.1; PID:q249861 A,Note: sequence extracted from MCH backbone (NCHH.197624, MCHF.197625) R;Clauss, M.: Gerlach, M.; Gerlach, H.; Brett, J.; Mang, F.; Famillotti, P.C.; Pan, Y A; Molecule type: mRNA A; Besidnes: 1-140, 209-214 RR2>

A; Accession: A60932 J. Exp. Med. 172, 1535-1545, 1990 A, Fitle: Vascular permeability factor, a tumor derived polypoptide that induces endot A; Reference number: A60932; MUID:91079755

ReSugihara, F.: Kaul, S.C.: Mitsui, Y.: Wadhwa, k. Biochim. Biophys. Acta 1224, 365–370, 1994 A:Fitle: Enlageved expression of multiple forms of VEGF is associated with spontaneous A:Reference number: \$52136; MULD:95101726 A:Accession: \$52136 A:Status: preliminary A; Molecule type: protein A; Residues: 27°33 *CLA

C;Keywords: alternative splicing: andiogenesis: disultide bond; glycoptoteln; homodim E;L 26/Asmain; signal sequence #status predicted .SEG: E;27 214/Froduct; vascular endothelial growth factor 3 #status experimental MAT A:Residues: 27-46 - SEC - C:Comment: Homodimers could be demonstrated for recombinant VEGE 2 but not VEGE 4. A;Molecule type: protein A;Residues: 27 46 \subsetem SUG \cdot

Best Local Similarity 116 ETLASTDIEWKNIQGMPREVGYDJAAREGATINTEEKPPCVSIYRCGGCCNSEGLQCMNI 175 47; Conservative 24.6%; <u>4</u> Pred. No. 8.4e-06; DB 2; Length 214; ss; Gaps

38 EVINEMBY-YORSYCKPIEILVOIFORYPOEIEYIFKPSCVPLMRCAGCCNOEALECVPL 36

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RESULT 10
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A;[ItTle: Bulbhiani ring 3 in Chironomus tentans encodes a 185 kDa secretory protein which
A;Reterorce number: JQ0542; MUID:90269600
A;Accession: JQ0542
A;Molecule type: mRNA
A;Besibes: I 169 EIG
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MARIvernate names: balbiani ring 3 protein
Cispecies: Chiconomos tentans
Cipate: 41-Dec-1941 #sequence_revision 41-Dec-1941 #text_change 17-Mar-2000
CiAccession. JU8942
                                                                         ArStatus: preliminary: 'ronsloted from SE/EMBL/DDBJ
ArMolecule type: DNA
ArResidues: 1-1187 <DEN+
                                                                                                                                                     J. Bacteriol. 176, 5929-597, 1994
A:Fitte: An amplifiable DNA region from the Mycoplasma hyochimis genome.
A:Reterence number: Z18888: MUID:95014025
A:Accession: T18355
                                                                                                                                                                                                                                                                                               hypothetical protein P4 - Mycoplasma hypothinis
CiSpecies: Mycoplasma hypothinis
CiDato: 15-bot 1955 #sequence_revision 15-bot 1966 #toxt_classe 07-for-1980
CiAccession: IIB355
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                       A:Closs-reterences: EMBL:111447: NID-gl5-0156: PID-q664956; PIDN:AAA62228
C:Senetics:
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A; denetic code: SGC3
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w.pate: 10-May-1996 #seguence_revision 19 Jul 1996 #text_change 05-Nov-1999
C:Accession: JC4680
R:Townson, S.: Lapercrange 1 = 0.1
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F:1-21/Domain: signal sequence #status predicted \SIG\
F:23-188/Product: vasculu: endothellal growth factor related factor #status predicted
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A;Residues: 1-188 <TOW>
A;Cross:references: GB:U43837; NID:gl314335; PIDN:AAC52553.1: PID:gl314436
C;Comment. This factor is a mitogen, that is selective for endothelial cells, and bellar endothelial growth factors 167 and VEGF 186.
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Blochem, Blopbys, Eds. Commun. 222-928, 1996
A;Title: Characterization of the murine VEGF related factor gene.
A:Peterence number: 304679; MUID:06184052
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A;Gene: vrf
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172 RGLELNPOICEC 183
                                                                                                                               281 PAKELDEDTOWN 292
                                                                                                                                                                                                                                             136 DSPRIICPPCIDREQERPPPRICE------PCFCFFF----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TEST SOMEOWING WARRENCE CLAND ON THE CAND WARRANT SANDERS OF WARRENCE AND THE CONTROL OF THE CANDIDATE OF TH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            107 KEAAAHYNAETLKSTISTEWEKTQGMPREVCVIJLGKEFGATINIFFKFPCVSTYRCCDGCN 166
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity 26.0%,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       84 PROLECYPTOQUQYRMQIIMIQYPSSQLGE---MSLEEHSQCECRPK-----KKESAVKP 135
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26.0%; Pred. No. 4e-05;
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                                                                                                                                                                                                                                                   --KFLHC<u>o</u>G 171
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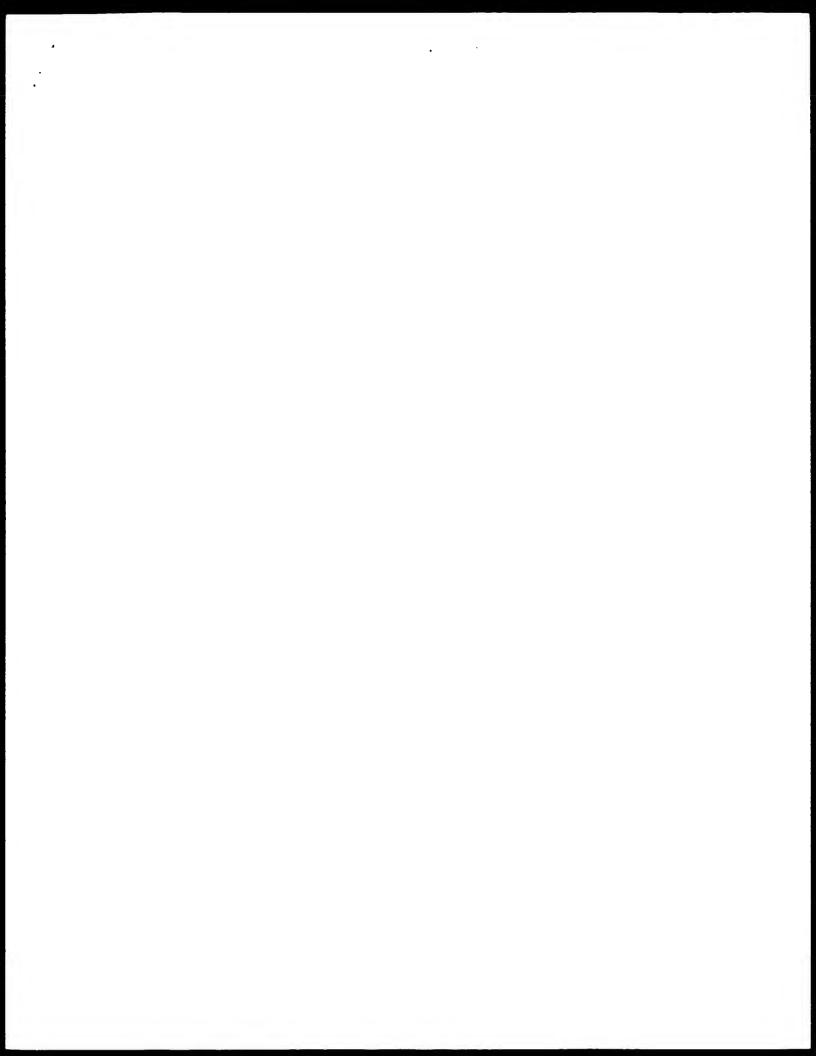
C;Genetics:

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C; Accession: A 3 3 187
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Cuspecies: Bos primigenius tangus (cattle)
Cubate: [6 Mar-1990]#sequence revision [6-Mar-1990]#fext_change 05 Nov 1999
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Clapectos: owis orientalis arios, owis ammon arios (domestic sheep)
Clade: 13 dan 1996 #sequence_revision 01-Mar-1996 #rext_change 05 Nov-1999
Clacevession: 85/1956
A;Cross references: GB:1.29454; NID:q5/5509; PIDN:AAA56840.1; PID:q575510
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Rivin, W.: Smiley, E.: Germiller, J.: Sandmineti, C.: Lawton, T.: Pereira, L.: Ramirez, J.: Biol. Chem. 270, 1298-1806, 1995
Activite: Primory structure and developmental expression of Fbm-1, the mouse ribrillin qu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Compared as Man Hoos #sequence revision 24 Mar 1995 #text_change listan-2000
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Rrochem. Brophys. Res. Commun. 165, 1198-1206, 1989
A:Title: Vascular epolothelial growth factor: a new member of the platetet derived growth
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A; Modecule type: mkNA
A; kesidues: 1 146 - kED.
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A: Residues: | 1 | 20 - FIS
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A:Accession: A:8787
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                                                     A:Cross references: EMBL:X89506; NID:q899350; PIDN:CAA61677.1; PID:q899351
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A;Molecule type: DNA
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A;Moss reterrences: GB:S67522; NID:q456900; PIDN:AAR29224.1; PID:q456902
A;Note: sequence extracted from NCB: backbone (NCBIN:141422, NCBIP:141426)
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Hest Local Similarity 25:2%; Prod. No. 0.005;
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                                                                                                                                 180 ISKILEELTVELSHOPKE-----VIVSEANHISCROMSK 21+
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THE REPORT OF THE PROPERTY OF	modified and this statement is not removed. Usage by and for commercia	use by non-profit institutions as long as its content is in no wa	the European Bioinformatics Institute. There are no restrictions on it	between the Swiss Institute of Bioinformatics and the EMBL outstation	This SWISS-DROT entry is copyright. It is resulted through a collaboration	A THE CAPTURE OF COMMON TO THE CONTY AND THE CAPTURE OF CONTY OF THE C	-!- PIM: PROBABLY PROTEOTHICALLY PROCESSED IN THE C'IERMINUS.	7		- I - FUNCTION: GROWTH FACTOR ACTIVE IN ANGIOGENESIS, AND ENDOTHELIAL	Submitted (1918-1995) to the EMAL Sheekank SDBT databases.	WOOD C.R.	20 Ref B. Wand J. Vickbard E. Gassaway R. Turner K.	BUIGNESS F., GLADBOULL J., GLALLEUGA A., HEBBESSEY D., KOVACIO S., BUISNESS F., GLADBOULL J., GLALLEUGA A., HEBBESSEY D., KOVACIO S.,		SEQUENCE FROM N.A.	[4]	Proc. Natl. Acad. Sci. U.S.A. 93:1988 1992(1996).	Pascular endotherrar growsh factor feraced protein: a figant and	Lee 3. Gray A. Yuan J., Luch S. M., Avraham H., Wood W.L.:	MEDILINE -96312526; PubMed-8700972;	SEQUENCE FROM N.A.	[3]	MMRO I - 15. 701731-17517190 N., ACTORIO F.,	Desired V. Rajayesia J. Salpannen A., Chilley D., Lähtinen I., Kikk E.,		ERRATUM.				factor Vece-C is a ligary t	CONTROL V. CANADA A PARTY AND A CONTROL OF CONTROL V. MARK D	ability of the land of which	SEQUENCE FROM N.A., AND SEQUENCE OF 103-120.		NCB1_Tax1D=9606;	Mammalia, Eutheria, Prinates, Catarrhini, Hominidae, Homo.	Eukaryotas Med azoas Chordata: Cranlata: Vertebrata: Euteleostomi:	Momo sapiess (Homas)		ENDOTHELIAL GROWTH FACTOR RELATED PROTEIN) (VRP) (FLT4 LIGAND) (FLT4-	VASCULAR ENIOTHELIAL GROWTH FACTOR C PREDICESOR (VESE-C) (VASCULAR	OF AND 1990 (ART. 34) TABL BENGARANGE HUMATAN	01-041-1996 (86) 34 (February Industry)	P49767:	VEGC_HUMAN SIANDARD; PKI; 419 AA.	HUMAN	

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entities requires a license agreement (See http://www.isb-sib-ch/anneumer.ial or send an email to license#isb-sib.ch).
                                                                                                                                                                                        REPEAT
REPEAT
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-:- FUNCTION: GROWTH FACTOR ACTIVE IN ANGIOGENESIS, AND ENDOTHELIAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              "VEGF-C receptor binding and pattern of expression with VEGFK-3 suggests a role in lymphatic vascular development.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mus musculus (Mouse).
Eukaryota; Metazoa; Chordata; Cfuniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Schuroquathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                              SMART: SM00141; PDGF; 1. PROSTIE; PS00244; PDGF_1; 1. PROSTIE; PS50278; PDGF_2; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              use by non-profit institutions as long as its content is modified and this statement is not removed. Usage by and to
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Kukk E., Lymboussaki A., Taira S., Kaipainen A., Jeltsch M. Joukov V., Alitalo K.;
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InterPro: IPRU00072; PDGF.
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EMBL: 058112; AAB46707.1;
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Wang J., Gassaway R., Nickbarg E., Kovacic S., Ciarletta A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDI.INE-97388482; PubMed=9247316;
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J. Mol. Biol. 211,331-349(1995)

-i- FUNCTION: USED BY THE LARVAE TO CONSTRUCT A SUPRAMOLECULAR STRUCTURE. THE LARVAE THE EARLAND RING PROTEIN 3 COULD PLAY A ROLE AS A LARANSFORT PROTEIN THAI BINDS TO OTHER PROTEINS INTRACELLULARLY AND IN THE GLAND LUMEN IN GREEK TO PREVENT THESE FROM PORMUNIC WATER-INSTITUTE FLAND LUMEN IN GREEK TO PREVENT THESE FROM PORMUNIC WATER-INSTITUTE FROM FOR THE PROTEINS TO CAPITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  the European Bioinformatics Institute—There are no restrictions on use by non-profit institutions as long as its content is in no modified and this statement is not removed. Usage by and for commer
                                                                                                 Repeat: Signal SIGNAL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation - the European Bioinformatics Institute. There are no restrictions on its
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01-001-1994 (Ref. 27, Last sequence update)
01-001-1994 (Ref. 30, Last amortation update)
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01-APR-1990 (Rel. 14, Last sequence update)
20-AUG-2001 (Rel. 40, last annotation update)
VASCULAR ENDOTHELIAL GROWTH FACTOR PRECURSOR (VEGF) (VASCULAR PERMEABILITY FACTOR) (VPF).
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MEDLINE 90062112; PubMed=2584205; Connolly D.T., Clander J.V., Heuv
                                                                                                                                                                                                                                 "AIDS-associated Kaposi's sarcoma cells in culture express vascular endothelial growth factor.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Tischer E., Milchell R., Hartman T., Silva M., Gospodarowicz D., Fiddes J.C., Abraham J.A.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A. MEDLINE=91268072; PubMed=1711045;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PDGF
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"Vascular endothelial growth factor is a secreted angiogenic
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                                                                                               PRELIMINARY SEQUENCE OF 23-46; 44-50 AND 59-81.
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Heuvelman D.,

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t FUNCTION, GROWTH FACTO
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Wiesmann C., Christinger H.W., Cochran A.G., Cunningham B.C.,
Fairbrother W.J., Keenan C.J., Meng G., de Vos A.M.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 binding."
                                                         or send an email to license fish sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       endothedial growth factor.";
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"III, 130, and 150 backbone assignment and secondary structure of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               peptide."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     "The crystal structure of vascular endothelial growth factor (VEGP) refined to 1.93 A resolution; multiple copy flexibility and receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  mapping of the kinase domain receptor binding site." Proc. Natl. Acad. Sci. U.S.A. 94:7192-7197(1997).
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                                                                                entilies requires a libeuse agreement (See http://www.isb-sib-ch/announce/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         "solution structure of the heparin-binding domain of vascular
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Starovasnik M.A.:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              receptor binding domain of vascular endothelial growth factor.";
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Muller Y.A., Christinger H.W., Keyt B.A., de Vos A.M.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDITINE 98035455; PubMed 9351807;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     der Voss A.M.;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDITINE 93145-946; PubMed 7678805;
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"Human vascular permeability factor. Isolation from U937 cells.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STRUCTURE BY NMR OF 132 215
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STRUCTURE BY NMR OF 34 135
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       X KAY ERYSTALLESKAPHY (1.9 ANGSIROMS) OF 39-134
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                                                                                                                                                                                                                                                                                                                                                                                                                                               FUNCTION. GROWTH FACTOR ACTIVE IN ANGLOGENESTS, AND ENDOTHELIAL
                                                                                                                                                                                                                                SIMILARITY: BELONGS TO THE PIGE/VEGE FAMILY OF CROWLE FACTORS
                                                                                                                                                                                                                                                                                                                                                                                                                         CELL GROWTH, INDUCES ENDOTHELIAL PROLIFERATION AND VASCULAR
                                                                                                                                                                                                                                                    ALTERNATIVE SPLICING OF THE SAME GENE (VEGF-121, VEGF-165 VEGF-189 AND VEGF-215).
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                    M 42977; AAA 45789.1;
M27281; AAA36807.1;
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S17348; S17348.
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C40454; C40454.
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215 AA;
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N-LINKED (GLONAG. . .).
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20-AUG-2001 (Ret. 40, Last annotation update)
VASCULAK ENDOTHELIAL GROWTH FACTOR PRECURSOR (VEGF) (VASCULAR
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PROSITE: PS50278; PDGE_2; 1.
Mitodon: Growth factor; Glycoprotein; Signal.
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or send an email to license(isb-sib.ch).
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-!- FUNCTION: GROWTH FACTIOR ACTIVE IN ANGIOGENESIS, AND ENDOTHELIAL CELL GROWTH. INDUCES ENDOTHELIAL PROLIFFRATION AND VASCULAR
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDLINE-95143284: PubMed-7841203;
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Mammalia: Eutheria: Cetartiodactyla: Suina: Suidae: Sus.
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modified and this statement is not removed. Usage by a
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01-AUG-1990 (Rel. 15, Last sequence update)
20-AUG-2001 (Rel. 40, Last annotation update)
VASCULAR ENDOTHELIAL GROWTH FACTOR PRECURSOR (VEGE) (VASCULAR
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or send an email to licensemisbesib.ch).
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-:- SUBCELLULAR LOCATION: SECRETED BUT REMAINS ASSOCIATED TO CELLS OR
TO THE EXTRACELLULAR MATRIX UNLESS RELEASED BY HEPARIN (BY
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Mammalla: Eutheria: Rodentia: Sciurognathi: Muridae: Murinae: Rattus
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Y Match 8.0%; Score 188.5; DB i Local Similarity 22.1%; Pred. No. 4.5e-08;
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c. Natl. Acad. Sci. U.S.A. 87:2628-2633(1990).
FUNCTION: GROWTH FACTOR ACTIVE IN ANGIOGENESIS, AND ENDOTHELIAL
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VASCULAR EMBETHELIAL GROWTH FACTOR (VEGP) (VASCULAR PERMEABILITY
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ESSE; P15692; 2VGH.
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Biochem. Biophys. Res. Commun. 161:851-858(1989).
-!- FUNCTION: GROWTH FACTOR ACTIVE IN ANGIOCENESIS, AND ENDOTHELIAL
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Mammalia; Eutheria; Cetartiodaetyla; Rominantia; Pecora; Bovoidea;
Bovidae; Bovinae; Bos.
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20 AUG-2001 (Rel. 40, Last aunotation update)
VASCULAR ENDOTHELIAL GEOMTH FACTOR PRECURSOR (VEGF) (VASCULAR
PIR; A33255; A33255
                 EMBL: M31836; AAA30804.1;
EMBL: M33750; AAA30805.1;
                                                                                                   outities requires a license agreement (see http://www.isb-sib-ch/announce/
or send an email to licensewish-sib-ch).
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                                                                                                                                                              the European Bioinformatics Institute. There are no restrictions use by non-profit institutions as long as its content is in
                                                                                                                                                                                                        This SWISS-PROT entry is copyright. It is produced through a collaboration between the SWISS Institute of Bioinformatics and the EMBL outstation :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      "Pituitary follicular cells secrete a novel beparin binding growth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE OF 27-31.
MEDITNE 89286596; PubMed 2735925;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       derived growth factor gene family.";
Riochem. Biophys. Ros. Commun. 165:1198-1206(1989).
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01-OPR-1996 (Rel. 34, Last segmence update)
01-OPR-1996 (Rel. 34, Last segmence update)
20-AUG-2001 (Rel. 40, Last annovation update)
VASCULAR ENDOTHELIAL GROWTH FACTOR PRECIESOR (VEGF) (VASCULAR RERMEABILITY FACTOR) (VPF).
                                                                                                                                                                                                                       Breier G., Albrecht U., Sterrer S., Risan W.:
"Expression of vascular endothelial growth factor during embryonic
angiogenesis and endothelial cell differentiation.";
                                                                                                                                                                                                                                                                                                                                                                                                         Fikaryota: Metazoa: Chordafa: Craniata: Vertebrafa: Eufeleostomi:
Mammalia: Eufheria: Rodentia: Sciuroquathi: Muridae; Murimae; Mus
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                                             differentiation and activated second messenger pathways.";
                                                                                                                         SEQUENCE FROM N A (VFOF-1)
MEDLINE 92455593; PubMed-1644816;
                                                                                                                                                                                                       Development 114:521-532(1992).
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                                                                      Claffey K.L., Wilkison W.O., Spiegeiman B.
"Vascular endothelial growth factor, Regul
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MGD; MG1:103178; Veqt.
InterPro: IPR000072; PDGF.
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PROSITE: NOON!
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                                                                                                                             SEQUENCE
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TO CELL ASSUCIATION/HEPARIN-BINDING.

TISSUE SPECIFICITY: IN DEVELOPING EMBRYOS, EXDRESSED MAINLY IN TISSUE SPECIFICAUS, FARACHIA AND KIDNEY GLOMERULI. ALSO FOUND IN BRONCHIAL EPITHELIUM, DIMENAL GLAND AND IN SEMINIFEROUS THROLES OF TESTIS, HIGH EXPRESSION OF VEGF CONTINUES IN KIDNEY GLOMERULI AND CHOROLD FILADS IN ADULIS.
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Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Enteleostomi;
Archosauria; Aves; Neoquathae; Gallitormes; Phasianidae; Phasianinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (TEK. I) are expressed dering vasculogenesis and vascular differentiation in the qualit embryo. *;
if purelies the will twelve Activity is Archodomosis, and experied the purelies dewill twelve Activity Productional Archodomosis, and experied the Cell Geometry Induces embourherial Productional On Ann Vascular
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                          between the Swiss institute of Hoinformatics and the EMM, outstation the European Bioinformatics first but to the content is in no was by non-profit institutions as long as its content is in no was modified and this statement is not removed. Usage by and for commercial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Flamme 1., von Keutern M., Drexler H.C., Syed-Ali S., Kisan W., "Overbypression of vascular condethelial growth factor in the agian embryo induces hypervascularization and increased vascular permeability without alterations of embryonic pattern formation.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          15 JUL 1998 (Ref. 36, Last sequence update)
20 AUG 2001 (Ref. 40, Last annotation update)
VASCULAK ENDOTHELIAL GROWTH FACTOR PRECUESOR (VEGE) (VASCULAR
                                                                                                                                                                      thus SWISS PROFECULTY is copyright. It is produced through a collaboration
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            *Vascular endothelial growth factor (VEGF) and VEGF receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDITAL 95301109; PubMed 7781909;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE OF 60 187 FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SPECIES C.e. Japonica: TISSUE Embryo; MEDLINE 96005007; PubMed 7556923;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Submitted (FEH-1998) to the EMBL/GenBank/DDBJ databases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SPECIES Chickon, TISSUE-Heart,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
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01 oct 1995 (Ref. 34, Created)
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                                                                                                                                                                                                                                                  SIMILARITY: RELUNCS TO THE PROF/VEGE FAMILY OF GROWTH FACTORS
                                                                                                                                                                                                                                                                                        FORM IS DETECTABLE ONLY FROM DAY 2.
                                                                                                                                                                                                                                                                                                                  AND IS HERRADED DEBKIND CASTRUDIATION, IXPRESSION OF THE VIXE 190 AND ISTURES IN RIGHTS CASTRUDIATION.
                                                                                                                                                                                                                                                                                                                                                                                                                                                           TISSUE SPECIFICITY: ABBINDANTLY AND EQUALLY EXPRESSED IN HEART AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CHMMINT: HOWOLDER: DISTILETER LINKED (BY SIMHLARITY).
ALTERNATIVE PRODUCTS: THREE ISOFORMS (VEGE-190, VEGE-146 AND VEGE-
160) ARE PROJUCTED AS A RESULT OF ALTERNATIVE SPLICING OF THE SAME
CENE. THE LUNGER FORM CONTAINS A HASIC INSERT WHICH ACTS AS A CELL
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entities requires a license agreement (see http://www.isb-sib.ch/annonneo/

and for connercial

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PROPERTY NAME OF THE PROPERTY 
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Hest Local Similarity
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01-off: 1996 (Rel. 34, Last sequence update)
20-AUG: 2001 (Rel. 40, Last annotation update)
VASCULAR ENDOTHELIAL GROWTH FACTOR B PRECURSOR (VEGE B) (VASCULAR
                        olotsson B. Pajusola K., Kripainen A., von Enlor C., Jonkov V.,
Saksola O., Orpana A., Pettersson R.F., Alitalo K., Eriksson U.:
"Vascular endotheljal growth factor B, a novel growth factor for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DISHLFID
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HSSP: P15692; 2VUH.
InterPro: TPROGRO72; PDGF.
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Mammadia: Eatheria: Rodentia: Sciurognathi: Muridae; Murinae; Mus
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endothelial cells.";
                                                                                                                    MEDLINE 96197355; PubMed 8637916;
                                                                                                                                                                              SEQUENCE FROM N.A.
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                                                                                                                                            FISSUE-Heart:
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MISSING (IN ISOFORM VEGE-166).
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INTERCHAIN (BY SIMILARTY)
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K ·· N (IN ISOFORM VEGE-16)
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VASCULAR ENDOTHELIAL GROWTH FACTOR
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                                    01-007-1996 (Rel. 44, Created)
01-007-1996 (Rel. 44, Last sequence update)
20-AUC-2001 (Rel. 40, Last surgetation update)
VASCULAR ENDOTHELIAL GROWIN FACTOR & PRECURSOR (VEGE-6) (VEGE PYLATED
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InterPro; IPR000072; PDGF.
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or send an email to licenserisb-sib-ch)
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Nordenskjoeld M., Weber G., Bayward N.K.;
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                       FACILIER)
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FUNCTION: GROWIH FACTOR FOR ENDOTHELIAL CELLS. BINDS HEPARIN.
SUBUNIT: HOMODIMEP: DISULFIDE-LINKED. CAN ALSO FORM HETERODIMER
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5 Mismatches 78;
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Best Local Similarity 21.6%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Grimmond S., Lagercrantz J., Drinkwater C., Silins G., Townson S., Pollowk P., Gotley D., Garson F., Pykar S., Nordenskjoeld M., Wald L., Hayward N., Weber G.:
"Closing and defense section for the section of the sect
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Olefssen B., Pajusela K., Kaipainen A., von Euler G., Jerkey
Saksela O., Orpana A., Pettersson R.E., Alitalo K., Eriksson
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE
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PROSITE: PS90278; PROF_2: 1.
PROSITE: PS90278; PROF_2: 1.
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Eukaryota: Metaloa: Chordata: Craniata: Vertebrata: Enteleostomi:
Mammalia: Eutheria: Primates: Catarrhini: Hominidae: Homo.
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Probom; PE001624; PDGF; 1.
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-!- FUNCTION: GROWTH FACTOR FOR ENDOTHELIAL CELLS. HINDS HETAKIN
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144
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                                                                   ZAG POMPONYPONYPONYPONYPONKATIBASONYMPKNYTI PSSPIPONKAHARANONI 340
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--BORPUPRICRORORRESELECOGRGLELNPDICEC 183
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of 88 1996 (Ref. 44, Last sequence update)
20 AUG 2001 (Ref. 44, Last annotation update)
VASCULAR ENDOTHELIAL GROWTH FACTOR PRECURSOR (VEGE) (VASCULAR
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Mammalia: Eutheria: Cetartiodactyla: Ruminantia: Pecora: Bovoidea:
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Submitted (APR-1995) to the EMBL/Aboutank/1981 databases.
FUNCTION: STRUCTURAL COMPONING OF CONNECTIVE TISSUE MICKOPHRILS
THAT KINDS CALCIUM, FIRRILLIN-1-CONTAINING MICKOFIRKILS PROVIDE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDIINE-95130561; PubMcd-7829516; Yin W., Germiller J., Sanquineti C., Smiley E., Panqilinan T., Yin W., Germiller J., Sanquineti C., Smiley E., Panqilinan T., Pereira L., Kamirez F., Bonadio J.; "Primary Structure and developmental expression of Ebn-1, the mouse tibrillin gene":
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        Matt Charge
                                       Overy Match 6,48: Score 150; DB 1; Dength 148; Best Local Similarity (1.08; Pred. No. 3,6e 05;
                                                                                                                                                                                                                    SEQUENCE
OVERHAND
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013/108/10
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0] off 1996 (Ref. 34, Last sequence update)
20 AUG 200] (Ref. 40, Last annotation update)
VASCULAR ENDOTHELIAL GROWIH FACTOR HOMOLOG PRECURSOR.
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Milogen: Growth Lactor; Glycoprofein; Signal.
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Search completed: February 20, 2002, 16:27:44 Job time: 171 sec

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Post-processing: Minimum Match 0%
Maximum Match 1908
Listing first 45 summaries
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Perfect score:
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result	Score	Match Match	onery Match Length DB	₽.	110	Description
~	12 341	13.1	4. Z	 	0.73.73	557350 Production 200
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÷	666	. 83	358		Py7946	P97946 mus musculu
٦.	636.5	27.9	325		525251	035251 rattus norv
5	556	23.5	125	:-	0.45757	-1
7	232	5. 5.	1698	٦n	Q94438	094438 chironopus
x	231	⊊. 8	1704	J	094446	Q94446 chironomus
5	211.5	9.0	242	-	©9H1₩9	09h1w9 homo sapies
] -)	211.5	9.0	254	4	Q15889	Q16889 homo sapien
11	205 5	æ Æ	10 S	Ġ.	C9XSE4	ç9xsf4 canis famil
12	202	8.5	209	4	050720	060720 homo sapien
1 4	199.5	8.5	214	5	U9XSE5	ÿ9xsf5 canis tamil
14	198.5	8.4	214	5	OSMYV3	
15	196	œ. .s.	122	6	Q9GLX1	
16	194.5	æ	190	6	CASSE3	
17	193,5	00 . U	1.50	ē	C9:1880	Q94kr0 equus cabal
18	186.5	7.4	190	:7"	Q90I.52	Q9q152 sus scrofa
19	186.5	7.9	190	_	OHOXXA	Q9qx39 spalax leuc

45 149.5	44 151	43 152.5	42 152.5	41 156.5				37 161.5											26 174					21 184	20 184
6.4	6.4	ún ún	6.5	6.6	5 5	6.6	6.7	5.9	6.9	6.9	7.0	7.0	7.1	7.1	7.2	17	7.2	7.3	7.4	7.4	7.4	7.7	J 10	7.8	7.8
170	123	663	146	800	170	148	118	301	188	126	704	314	150	124	188	140	1187	147	190	214	171	190	. 74	194	191
4 Q9BV78	6 Q9N1S1	5 044247	11 09QXC6	5 U9VB78	11 OSTKX7	13 042571	6 Q9MZB1	5 <u>U9VWP6</u>	6 Q9XS48	6 09BDP7	3 074567	5 Q9BLX1	11 054881	6 Q9GK00	13 073682	31×36.0 11	2 049549	4 Q9UH58	11 099PS1	11 090XG7	4 Q9H1W8	6 077643	4 हुन्पट्र	13 042572	4 075875
gybv78 homo sapien	O9mlsl capreolus c	044247 hemicentrot	Opdxde tattus norv	Q9vb78 drosophila	_oqjkx7_rattus πorv	042571 xenopus lae	Q9mzbl ovis aries	Q9vwp6 drosophila	Q9xs48 bos taurus	⊈9bdp7 macaca mula	©74567 trichoderma	y9blxl drosophila	054881 rattus norv	Q9qk00 callithrix	079682 brachydanio	©9erlf mestericetu	©49549 mycoplasma	y⊌uh58 homo sapien	Q99ps1 mesecricetu	⊌9qxq7 rattus norv	Q9hlw8 homo sapien	077643 ovis aries	deliga some suplem	:42572 xenopus lue	o75875 homo sapien

ALIGNMENTS

RESULT	
0 (11	057352 PRELIMINARY: PRI: 418 AA.
AC.	2;
DT	01-JUN-1998 (TrEMBLrel. 06, Created)
DT	
DT	01-JUN-2001 (TrEMBLrel. 17, Last annotation update)
DE	VASCULAR ENDOTHELIAL GROWTH FACTOR C PRETURSOR.
S C	
S	Coturnix coturnix japonica (Japanese quail).
00	Eukaryota; Metusoa; Chordata; Graniata; Vertebrata; Euteleostomi;
ુ	Archesauria: Aves; Neognathae; Gallitormes; Phasianidae; Phasianinae;
3	Coturnix.
္က	NCBI_TaxID:93934;
æ Z	[1]
RT.	SEQUENCE FROM N.A.
R X	MEDLINE+98167900; PubMed-9435294;
RA	Richmann A , Corbel C., Jaffredo T., Breant V., Joukov V., Kumar V.,
RA	Alitalo K., Le Douarin N.M.;
RT.	"Avian VEGF-C: cloning, embryonic expression pattern and stimulation
ΚT	of the differentiation of VEGFR2-expressing endothelial cell
RT	precursors.";
K.	Development 125:743-752(1998).
77	EMMS: 125832, PAA25299.1;
PK	HSSP; P15692; IVPP.
DR	InterPro: IPP002400: GE_cysknot.
DR.	InterPro; IPR000476; Glyco_hormone.
DK.	Tate:Pto, TER030072, PDGF.
DR	P1am; PF00341; EDGF; 1.
ź	PRINTS: PR00438; GFCYSKNOT.
DR	ProDom; PD001629; PD0F; 1.
5	SMART; SM00067; GHA; 1.
DR	SMART: SM00141: PDGF: 1.
DK	PSOSITE: PS00249; PDGF_1; 1.
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                                                                                                                                Oberty Match 75,6%; Score 1779; DB-6;
Best Local Similarity 73,9%; Bred. No. 1,8e-164
Matches 41; Conservative 45; Mismatches 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity 99.5%;
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01-NOV-1995 (TrEMHLIFEL 12, Created)
01-NOV-1995 (TrEMHLIFEL 12, Last sequence update)
01-JUN-2001 (TrEMHLIFEL 17, Last annotation update)
VASCULAR ENLOTHELIAL GROWTH FACTOR C PRECURSOR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Entheria; Cetartiodactyla; Rominantia; Pecora; Bovoidea;
Bovidae; Bozinae; Bos.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Lio X., Yonekura H., Yamaqishi S., Yamamoto Y., Yamamoto H.; "Structure and expression of begins VEET family."; Submitted (MAY 1997) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                       SEQUENCE
                                                                                                                                                                                                                                                                                                                                          NIVIL
                                                                                                                                                                                                                                                                                                                                                                                                                                     PROSITE: PS50278; PD8F_2: 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Probous PD001629; PDGF; I. SMARE; SMOUT41; PDGF; I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Plans Prooffly PloF; I.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PROSTIE; PS00249; PDGE_L; 1.
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                                                              L MHILLEMISIGOCIAAGAVILIGERGEE - VAAAYESGBGYYEEEFGAGEEKAHASKDLEEG 58
MILLE TELL TELL TELL TELL TELLETE TELL
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                                                                                                                                                                                                                                                                                                                                          VASCULAR ENDOTHELIAL GROWTH FACTOR C.
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01-JUN-1998 (TrEMBLIE). 06, Last sequence up
01-JUN-2001 (TrEMBLIE). 17, Last annotation
                                                                                                                        "Vascular endothelial growth factor D (VEGF-D) is a ligand for the tyrosine kinases VEGF receptor 2 (FIK1) and VEGF receptor 3 (FIT4).": Proc. Natl. Acad. Sci. U.S.A. 95:548-553(1998).
                                                                                                                                                                                                                                                                                                                                                                                                                                 "Human FIGE: cloning, gene structure, and mapping to chromosome Xp22.1 between the PIGA and the GRPR genes.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Enkaryota: Metazoa: Chordata: Craniata: Vertebrata: Enteleostomi: Mammalia: Entheria: Primates: Catarrhini; Hominidae; Homo.
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                EMBL: Y12868; CAA73371
EMBL: Y12869; CAA73371
                                                   EMBL; Y12866; CAA74371.1; JOINED.
EMBL; Y12867; CAA74371.1; JOINED.
                                                                                     EMBL; Y12864; CAA73371.1; -. EMBL; Y12865; CAA73371.1; JOINED.
                                                                                                                                                                            Achem M.G., Jeltsch M., Kukk E., Maekinen T., Vitali A., Wilks A.F.,
Alitalo K., Stacker S.A.;
                                                                                                                                                                                                               SEQUENCE FROM N.A. MEDILINE-98118549; PubMed-9435229;
                                                                                                                                                                                                                                                                     Genomics 42:483-488(1997).
                                                                                                                                                                                                                                                                                        VEGE-10
                                                                                                                                                                                                                                                                                                                                        MEDITINE -97 (49118; PubMed - 9205122;
                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                Genemies 47:207-216(1998).
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Rossi E., Hallabio A., Zuttardi O., Oliviero S.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDLINE 98140120; PubMed 9479493;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                      "Molecular cloning of a novel vascular endothelial growth factor,
                                                                                                                                                                                                                                                                                                                           Yamada Y., Nezu J., Shimane M., Hirata Y.;
                                                                                                                                                                                                                                                                                                                                                              TISSEE CINC:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             KSIDNEWRKTQCMPREVCIDVGKEFGAATNTEFKPPCVSVYKCGGCCNSFGQQCMNTSIS 180
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P97946;
01-MAY-1997 (TERMELTEL 03, Created)
01-MAY-1997 (TERMELTEL 03, Last sequence update)
01-JUN-2001 (TERMELTEL 17, Last annotation update)
VASCULAR ENDOTHELIAL GROWIN PACTOR D (C-FOS INDUCED GROWTH FACTOR).
                                Yamada Y., Nezu J., Shimane M., Hirata Y.:
"Melecular electing of a morel vascular endothelial growth factor
VEGF-D.";
  EMBL
                                                                                                                                                                                         tamily.
                                                                                                                                                                                                         platelet-derived growth factor/vascular endothelial growth factor
                                                                                                                                                                                                                           ordandini M. Marroscini L., Ferruzzi R., Olimero S.;
"Identification of a c-fos-induced gene that is related to the
                                                                                                                                                                                                                                                            MFDIINF=97030254; PubMed=8876195;
                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A. SIRAIN C57BL/61;
                                                                                                                                                                                                                                                                                                                                           NCBI_TaxID: 10090;
                                                                                                                                                                                                                                                                                                                                                                Eukaryota: Motazoa: Chordata: Craniata: Vertebrata: Eutolcostomi:
Mammalia: Eutheria: Rodentia: Sciurognathi; Muridae: Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                  Mus musculus (Mouse)
Enkaryota: Motazoa:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PROSTIE: PS00244; PDGF_1; |
PROSTIE: PS50278; PDGF_2; |
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Prolom: PD001629; PDGF; 1.
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EMBL: Y12863; CAA73370.1; -.
HSSP: P15692; IVPP.
Commics 42:483-488(1997)
EMBL: X99572; (AAA67892.1;
                                                                                         MEDITINE-97349118; PubMed 9205122;
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                                                                                                                                SECUENCE FROM N.A.
                                                                                                                                                                    Proc. Natl. Acad. Sci. U.S.A. 93:11675-11675(1996)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EMBL; D89630; BAA24264.1;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         353 NPAKOTO POTESPNKOFI KAKPEHHQTOSOYEPPOTVRITKPODAGELLAEEVOR 406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           213 DROSHSKKUTFILMLWDSNKCKCVLOSE---NFLAGTED-----
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    56 REGIRSVSSVDFIMIVIYPFYMKMFKOGIPKOGWGHNREHSSSDTRSDD--SLKFAAAHY 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DIETIKVIDEEWDETCOSEKETOVEVASELEKSTNTEFKPPOVNVEROGGONEESLICM
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NTSTSYTSKEFFFISYPFTESYPELYPYKVANHFGCKCLPTAP--RHPYSITRKS101PEF 212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NISTNYISKTLEEITVELSHÖPKEVTVSEANHISCHOMSKLEVYRQVHS1IEESLE-ATQ 232
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                                                                                                               EUNG:
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Best Local Similarity
Matches 135; Conserv
PROSITE; PS00249; PDGE_1; 1.
FROSITE; PS00278; PDGE_2: 1.
SEQUENCE: 326 AA; 37112 MW;
                                                                                                                                                                                                                                                                                                                                                                                    035251;
01-JAN-1998 (TrEMBLIEL 05, Created)
01-JAN-1998 (TrEMBLIEL 05, Last sequence update)
01-JUN-2001 (TrEMBLIEL 17, Last annotation update)
VASCULAR ENDOTHELIAL GROWTH FACTOR D.
                                                                                                                                                                                                              STRAIN-SPRAGUE DAWLEY;
MEDLINE-97349118; PubMcd-9205122;
Yamada Y., Nezu J., Shimane M., Hirata Y.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Interpro; IPR000072; PDGF.
Pfam; PF00341; PDGF; 1.
ProDom; PD001629; PDGF; 1.
SMART; SM00141; PDGF; 1.
                                                      ProDom: PD001629; PDGF; 1.
SMARI; SM00141; PDGF; 1.
                                                                                                                         EMBL: AF014827; AAE
HSSP: P15692; IVPP.
                                                                                                                                                                                "Molecular cloning of a novel vascular endothelial stowth factors 
VEGF-D.";
                                                                                                                                                                                                                                                                                                    NCBI_TaxID=10116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE
                                                                                        Ptam: PF00341; PDGF; 1
                                                                                                                                                             Genomics 42:483-488(1997)
                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A
                                                                                                                                                                                                                                                                                                                        Mammalia; Eatheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus
                                                                                                                                                                                                                                                                                                                                         Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                          Rattus norvegicus (Rat).
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                                                                                                          InterPro; IPR000072; PDGF
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                353 NPAKOIO-ECTESPNKOFIKSKPFHHQTOSOYRPPOTVRTKRO 394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   253 ----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 29 Y VOKOGVRPTSOGTHKELDRASOGOMORNALLIVSSTGYNAFFIEFEKTGTVIKATITYKHHPL - 352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      233. TOCHVANETODENHUMMNOTOROLAGHERSPICISESH ODSOTSBEEHLOODNET DEFICIO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          174 NISTNYISKTLFEITVPLSHGPKPVTVSFANHTSCKCMSKLDVYRQVHSIIRRSLPA-TQ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      46 EQQIRAASSLEELLQIAHSEDWKLWRCRLKL-----KSLASMDSRSASHRSTRFAATFY 99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    56 BEQLESVSSVOELMIVIYEETYWKMEKOQLEKGGWQHNEEHSSSDIESDO--SLKEAAAHY 113
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  358 AA; 40908 MW;
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                                                                                                                                            AAB66557.1;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          50, Mismatches
   1261AFA373596C00 CRC64;
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OLIAN 1998 (TERMITEL 05, Created)
OLIAN 1998 (TERMITEL 05, Last sequence update)
OLIAN 2009 (TERMITEL 17, Last sequence update)
VASCULAR ENDOTHELIAL GROWTH PACTOR C (PRAGMENT).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ETRAIN SPANIUE DAWLEY: IISSUE DINE: Mandinota S.J., Popper M.S.J. shippitted (JUN 1797) to the EMBL/Gerakio//Pooks database EMBL/APOTOTUZ; AAG6 248.1; ... HSSE: P19692; ZVPF.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PROBLEM: PSS0278: PDGF 2: 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Probam;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 InterPro: [PR000072; PD6F]
120 FHbVcGP 126
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                                                                                776 FH 10709 281
                                                                                                                                                                                                                                                                                                                                                                                                       TO VETTROOF CNEED AND MALERIAN LET BETTELL TO SERVE TO SEALHEST ROMSKED 215
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 289 BPENCSCERCKESLESTOUKHKMEHPDTC 317
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    y Match 23.6%; Soure 556; DB II; Length 126;
Local Similarity 19.5%; Fred. No. 2.5e 46;
hes 104; Conservation 10; Mismatches 14; Indels ...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             $53 NPAKCIC ECTESPNKCFTKGKKFHHQIC 380
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                                                                                                                                                             61 VYRQVBSTTRRSLFATLEGCQAANKECEANYVWNNYMCQCLAQQDFTFYSNVED-DSSNG-119
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                                                                                                                                                                                                                                                                                                                      | VSVVIGAGAGENSEGIAGEMNISTGYLSKTLEETTVIT.SQGPKPVTISFANHTSCKCMSKLD=60
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                                                                                                                                                                                                   | VYRQVIET FREELINGTQTQQTKQTKTFTKKHIVMNNQFCKCLAQHDFQFSSHCQSSDSDC 275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PD001629; PDGF; 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                13977 MW; BE365AFBC4E037B0 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1787;

    PALCGPHMMFDEDRCECVCKAPCPGDLIQ 288

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2: Caps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
Matches 75; Gonserv
                                                                                                                                                                                                                      094446;
Chironomidae; Chironomidae; Chironominae; Chironomus
NCBI_FaxID 7155;
[1]
                                                    Chironomus thummi thummi (Midge).
Enkaryota; Metazoa; Arthropoda; Tracheata; Hexapoda; Insecta;
Enkaryota; Neoptera; Endopreryqota; Diptera; Nemaforera;
Enteryota; Neoptera;
                                                                                                                                                       01 FIB 1997 (TrEMBLEEL 02, Created)
01-FEB-1997 (TrEMBLEEL 02, Last sequence update)
01-JUN-2001 (TrEMBLEEL 17, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TISSUE=SALIVARY GLAND: Case S.T., Cox C., Hell W.C., Hotiman R.T., Martin J., Hamilton R.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Eukaryota: Metaboa: Arthropoda, Tracheata: Hexapoda: Insecta:
Pterygota: Neoptera: Endopterygota: Diptera: Nematocera:
Chironomoidea: Chironomidae: Chironominae: Chironomus.
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01-FEB-1997 (TrEMBLrel. 02, Last sequence update)
01-JUN-2001 (TrEMBLrel. 17, Last annotation update)
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                                                                                                                        SP220
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InterPro: IPR000853; Mtllthion_nemat.
PKINIS; PR00876; MTNEMATODE.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Chironomus pallidivittatus (Midge).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Q94438;
                                                                                                                                             220 KDA SILK PROTEIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PROSITE; PS00022; EGF_1; UNKNOWN_1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              185 KDA SILK PROTEIN.
                                                                                                                                                                                                                                                                                                                                                 507 TCEAPQILDPNTCEC 521
                                                                                                                                                                                                                                                                                                                                                                                                                              449 FNAUTOQCECDESASKC - GNKRWNADIGKGEGQPGKFPEGGGKQTWISEKGKGEGSPAT 506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ZOTO FRITS CREEKLIDEAS (In MOKNALL TYST) GENKEEDEEKOQOVOKK - - -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    255 KEECIAKCK----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          133 REVOVELGKEEGAFTNEEEKPROVSLYRGGGO-CNSEGLGCMNISTNY1SKILEELIVEL 393
                                                                                                                                                                                                                                                                                                                                                                                      393 RCDAGFLLAEEVCRC 407
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  352 LNPAKCICECTESPNKCFLKGKKFHHQTCSCY----KPP--CTVRT---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          391 LP - CAAGKERGGESCOCKCINREPREGCSKSLVWNEDRCECVCYAGROMPVGGCESGKS 448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              252 ICKCLAQHDE-----GESSHLGDSDTSEG--EHICGENKELDEETCQCVCKGGV 258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    280 PQNKKY-----NKELCECHIKILAKONDOVENKULOSONOFOSASUKVOKKPOTYNNE 333
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SCKCGCPVDMQKP1DGCPKPQRWBS---DSCSCBCPLKQDRIKNGKVWDAI1CQC1CPRDA 39.0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1698 AA; 186164 MW; 82AF0838D9E2460E CRC64;
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23.8%; Pred. No. 1.4e-13;
artive 30; Mismatches 122;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Submitted (APR-1996) to the EMBL/GenBunk/FDBJ databases.
FMNI: 18464 - ΑΑΛΦΘΡΟΙ Ι:
                                                                                                                                                                                                                                                                                                                                                   01-MAR-2001 (TrEMBLIEL 16, Created)
01-MAR-2001 (TrEMBLIEL 16, Last sequence update)
01-JUN-2001 (TrEMBLIEL 17, last annotation update
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          InterFro: IPR000561: EGE-Like:
InterPro: IPR000853: Mtllthion_nemat.
PRINTS: PR00876: MTNEMATODE.
                                                                                                                                                                                                                                        Eukaryofa: Metazoa: Chordita: Craniata: Vertebrata; Enteleostomi
Mammalia; Entheria: Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                            ULTION 2001 (ITEMACE) | 1/ lest encetation apdate)
UZ561C24 6 3 (VASCULAR ENDVIHELIAL GROWTH FACTOR).
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PROSITE: PS01186: EGF_2: UNKNOWN_1.
SEQUEPHOT: 1794 AA: 185745 MW, RABE2021708F1E28 OROGI.
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  PROSITE:
                     Probom: PDU01629; PDGF; 1.
SMART; SM89141; FDGF; 1.
                                                                 Plam: PFO0341; PDGF;
                                                                                    InterPro: IPR000072; PPGF
                                                                                                         Submitted (DEC-2009) to the EMBL/GenFank/DDBJ databases EMBL; ALL16141: CAC19512.1; -.
                                                                                                                                                          Williams S.
                                                                                                                                                                             SECHENCE FROM N.A.
                                                                                                                                                                                                                       NCBI_laxID 9605;
                                                                                                                                                                                                                                                                                         Homo sapions (Human)
                                                                                                                                                                                                                                                                                                                                                                                                                          Q9H1W9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1357
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                253 CBOLAQHDEGESSHLGDSHTSEGEHLGGRNEELDEETGQCVCKGGVERISGGFHKELDRA 312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   963 DEMONOKSERAWSHDTOKOGOKNADDADDOVA---EQIWLENGO---KOGOPASKOMDOA 1016
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             39 EEEPOAGFPKAHASKU FEGURSVSSVDFUMIVI YPFYWKMFKOQUEKGGWQHNEEHSSS 98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ع
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OTCPAGUSWDSQTCQCSCP----ATGKCTGAQFWCAKQCKCV 1394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     KOFLKOKREHHQTOSOYRPPOTVRTKRODAGFILAFEVÇEÇV 408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NTCKCKOPNEKPALSOAKAKDEOPVINSOKOKSPKPANGOPOVQEWNEDKOKOEOPKINKS 1190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           YISKTLEELTVP------LSHGPKPVT----VSFANHTSCRCMSKLDVY 217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ENKREDEATCSCVCKSP--MPSV1PEGKKWNNETCA1ECANVGNCKAPQRWCDNICKCTC 1074
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DTRSDDSTKFAAAHYNAFIIKSIDTFWRKTQG-------MPREVCVDLGK--- 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TCACECPPGKA1PASCGDKKSWNPDSCSCOCKSKMPDBBCPPSNCOWNCETCKCFC--SGT 1350
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PS00249; PDGF_1; 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                               PRELIMINARY;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 9.8%; Score 231; 58.5; Length 1704;
19.5%; Pred. No. 1.8e-13;
                                                                                                                                                                                                                                                                                                                                                                                                                                               PKT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                 232 AA
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              Query Match 3:08, Score 211.5, DR 4. Bost Local Similarity 24.28; Pred. No. 1.6e 12; Matches 68; Conservative 33; Mismatches 105;
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01-NOV-1998 (TYEMBLIE) 08, Last sequence update)
01-JUN-2001 (TYEMBLIE) 17, Last annotation update)
VASCULAR ENDOTHELIAL GROWTH FACTOR (FRAGMENT).
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LMTVLYFEYWKMFKOGELFKOGWQHNELHSSSDIFSJUSLKFAAABYKAETLKSIDIEMEN 127

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RESHET 11
QUXSE4
1D QUXSE4
AC QUXSE4
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                                                                       04.0720
                                                                                                              PESHILI 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Host Lacal Similarity 24.5%; Prod. No. 9.5e
Matches 58; Conservative 28; Mismatches
06.07.20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OF NOV 1999 (TERMSLEEL 12, Created)
OF NOV 1999 (TERMSLEEL 12, Last sequence update)
OF JUN 2001 (FERMSLEEL 17, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Plans (PEO0341) (PBUF) 1.
Probons (PO001629) (PBUF) 1.
SMART: SMO0141; PBUF) 1.
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                                       06,07,20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Thing)ing L., Rogne R.S.;
Submitted (MAR 1999) to the EMBL/Genkank/DJRJ databases
EMBL, AFT4549, AND2968 C.L;
HSSP; P15692: ZVEF.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STAR CHEAT INCH
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
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                                                                                                                                                                                                                                 174 GERGERESER
                                                                                                                                                                                                                                                                                                                                                                           148 BOOMERKEENER
                                                                                                                                                                                                                                                                                                    EBF LIDEETS OF VOKOLVERS IS GERKELDRASOO MOKNKLLPSS GERKEFEEEKOOF 340
                                                                                                                                                                                                                                                                                                                                                                                                                                                       2.42 OFOTHVANKETERNHVMNOTERTAOHEETSSHLÖDSDISEGEHIGGENKE -----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           112 HYNAETLKSTDTEWRKTOGMPREVOVDLGKEFGATTNTFEKPFOVSTYRGGGCONSEGLO 171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ROO PERSONPHIKELDRASCOMMENKELLESSCHENKEFDEERGOG 340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WILLOWWINAAASM SBI
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                44 HKPHEVVKEMDV YQKSYCKPTETLVD1FQEYPDETEYFFKPSCVPLMR0GGCCNDEGLE 92
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CMNISTNYLEKTIFETTVPLSHCPKPYTVSPANHTSC/CMSKLDVYRQVHSITIKKSLPAT 231
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TOUMPREVOVDIGKEEGATENTEFKEPOVSTYROGGOONSEGLOOMNISTNYISKTLEET 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LILTERNAKWSQAAPMAEGGGQNHH - ---- -- -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BURGUHTGEMERTIGHNIK FREIKERANGEKKSYNGKEERGEKKSRIKKSKYKS - 184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CVV BCZ
                                       PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRELIMINARY;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               244 00 MW; CF77AC591F5C2BBE CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               · · · · · PWSLI-GPHP/GP/SERREHLEVQOPQ F/N/SCN · · · 229
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                                       EKT;
                                                                                                                                                                                                                                 NTDSRCKAROL -- -- ELNERFORG 201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ELNERTORO 249
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                                       VV 6.07
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                                       RESULT 13
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches 63,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ouery Match 8.6%; Score 202; DR 4; Length 209; Best Local Similarity 22.5%; Pred. No. 1.1e-11;
SASXNO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-AUG-1998 (TERMELTOL. 07, Created)
01-MAY-1999 (TERMELTOL. 10, Last sequence update)
01-JUN-2001 (TERMELTOL. 17, Last sequence update)
VEGF183 PROTEIN PRECURSOR (VASCULAR ENDOTHELIAL GROWTH FACTOR 18-0)
(DJ261623.6.6) (VASCULAR ENDOTHELIAL GROWTH FACTOR).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            "Edentification and characterization of a new splicing variant of vascular endothelial growth factor: VESF183.";
Biochim. Biophys. Acta, Gene Struct. Exp., 1443:400-406(1998).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EMBL: AJ010438: CAA09179.1; -.
EMBL: AF062645; AAC16730.1; -.
EMBL: AL136131; CAC19514.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDITINE 99096474; PubMed 9878851;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NCB1_TaxID-9606;
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Mammalia: Eutheria: Primates; Catarrhini: Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Signal.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PROSITE; PS00249; PDGF_1; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SMART; SM00141; PDGF; 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Probom; PD001629; PDGF; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 InterPro: IPR000072; PDGF.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Submitted (MAY-1998) to the EMPL/GenBank/DDRJ databases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Jingjing L., Roque k.S.;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE OF 114-209 FROM N.A.
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                                                                                               185
                                                                                                                               301 ISOURHEELDRASCOCMONNKI DESSOCIENKEEDEEROOC 340
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                                                                                                                                                                                                         248_WNNQTOROLAQHDEGESSHLCDSDLSEGEHTGGENKE------LDEETGQCVCKGGVKF-400
                                                                                                                                                                                                                                            110 KP--HOGORIGEMSFLOHNKOECRPKKDRARQEKKSVRUK---GKOQKRKKKKSKP
                                                                                                                                                                                                                                                                               188 TVPLSHGPKPVTVSFANHTSCRCMSKLDVYRQVHSTIKKSLPATOTOCHVANKTCFKNBV 247
                                                                                                                                                                                                                                                                                                                                      50 SYCHPIETLYDIFQEYPDEIEYIFKPSCYPLMRCGGCCNDEGLECYPTEESNIFMQIMKI 109
                                                                                                                                                                                                                                                                                                                                                                                             14 LLLYLHHAKWSQAAPMAEGGGONHH------
                                                                                                                                                                                                                                                                                                                                                                                                                              68 LMTVLYPEYWKMEKOQLEKGOWQHNKEHSSSDIKSIDSLKEAAAHYNAEILKSIDTEWKK 127
                                                                                               -- -- -- NIDSRCKAROL -- - ELNERICRC 204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Jiang A., Pei
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             27 209 VECETAR PROTEIN.
209 AA; 24422 MW; FOIGCEARTO945H6GA CI664;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative 29; Mismatches 92; Indels 96; Gaps
   FRELIMINARY;
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 PRT:
   214
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01-NoV-1999 (FrEMBLifel, 12, Created)

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Best Local Similarity
Matches 59; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Problem: PD001629; PD0F; 1.
SMART; SMG0141: PD0F; 1.
PROSITE: PS00249; PD3F; 1: 1.
PROSITE: PSC0278: PD0F_2: 1.
SEQUIENCE 214 AA; 25151 MW:
                                                                                                                                                  Scheidegger P., Weiglhoter W., Suarez S., Kaser-Hotz B., Steiner R.,
Ballmer-Hoter K., Jaussi R.:
"Vascular enduthelial growth factor (VPGF) and its receptors in tumor-
                                                                                                                                                                                                                                                                                                                                       01-007-2000 (TrEMBLEEL 15, Created)
01-007-2000 (TrEMBLECL 15, Last sequence update)
01-007-2000 (TrEMBLECL 17, Last annotation update)
VASCULAR ENDOTHELIAL GROWIH FACTOR 188 PRECURSOR.
                                                                                                                                                                                                                                                                                                                                                                                                                                  FAAMGO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Jingjing L., Roque R.S.; submitted (MAP-1999) to the FMRE/SU-Face) TERT database EMBL; AF133250; AAD29684.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ol-NoV-1999 (TrEMBLrel. 12, Last sequence update) ol-JUN-2001 (TrEMBLrel. 17, Last annotation update)
                                Probom; PD001629; PDGF; 1. SMART; SM00141; PDGF; 1.
                                                                                                   EMBL; AJ133758; CAB82426.1;
                                                                                                                                    bearing dogs.":
                                                                                                                                                                                                                                                          NCB1_TaxID-9615;
                                                                                                                                                                                                                                                                        Bukanyeti: Metazea: Cleebhia: Crimilia, Vertebrata, Esteleostomi
Mammalia: Petheria: Carrivoru: Fiseipedia: Canidae: Canis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            InterPro: IPR000072; PDGF. Ptam; PFG0341; PDGF; 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TISSUE-HEALL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mammalia: Eutheria: Carmivora: Fissipedia: Camidae: Camis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota: Metazoa:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         VEGE
PROSITE: PS50274; PDGF_1; 1. PPGSITE: PS50274; PDGF_2; 1.
                                                                   Plam; PF00341; PDGF; 1.
                                                                                   InterPro: IPR000072; PDGF
                                                                                                                                                                                                     MEDI INE: 20125516.
                                                                                                                                                                                                                       SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                            Canis tamiliaris (1091).
                                                                                                                                                                                                                                                                                                                             VEGF
                                                                                                                                                                                                                                                                                                                                                                                                                CENAMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           HSSP; F15692; 2VPF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NCBI_TaxID=9615;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Camis familiaris (bog).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        VASCULAR ENDOTHELIAL GROWTH FACTOR 188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    179 QDPQTCKCSCK-------NIDSRCKARQL-----ELNERICRC 209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    285 IDEETOXIVOKGGVEPISCGPHKELDEASCGOMCKNKLLPSSCGPNKEFDEEKCQC 340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          172 CMNISTNYISKTLFETTVPLSH5PKPVTVSFANHTSCRCMSKLDVYRQVHSIIRRSLPAT 231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             112 HYNAETLKSTDTEWENTOGMEREVCYDTGKEFGALINTFFKEECVSTYRCGGCCNSEGIO 171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    O VETERENTEMETMETMETKER.A. HIGEMSET BESKOEPRPEKTRARLEKKSVEGK---3-147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         QTQCHVANKTCPKNHVWNNQICRCLAQHDEGFSSHLGDSDTSEGFHICGPNKE-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               HKPHEVVKFMDV-YQRSYCRPIETLVDIFQEYPDBIEYIFKPSCVPLMRCGGCCNDEGLE 92
                                                                                                                       Chem.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                     380:1449-1454(1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                  PRELIMINARY;
                                                                                                                                                                                                       PubMed-10551874
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25,0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   30: Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                  214 AA
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                                                                                                                                                                                                                            Best Lore
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 8.4%: Score 198.5; DR 6 Best Local Similarity 24.3%; Pred. No. 2.4e-11;
                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                   NON_TER
                                                                                                                                                                                                                                                                                                                                                                                                                             Mandriota S.J., Pepper M.S.; Submitted (OCT-1998) to the EMBL/GenHank/DDHJ databases. EMBL; AFU99135; AAG29747.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-MAR-2001 (TrEMBLECL. 16, Created)
01-MAR-2001 (TrEMBLECL. 16, Last sequence update)
01-JUN-2001 (TrEMBLECL. 17, Last annotation update)
VASCULAR FRUMITHFILAL GROWTH FACTOR-D (FRAGMENT).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mammalia; Eutheria; ©
Bovidae; Bovinae; Bos
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Q9GLX1;
                                                                                                                                                                                                                                                                                                                                 SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TISSUE-LUNG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NCBI_TaxID=9913;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Bos taurus (Bovine)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   VEGF-D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  09GLX1
                                                                                                                                                                                                                                                                                                                                                                                        ProDom; PD001624; PDGF; 1.
                                                                                                                                                                                                                                                                                                                                                                                                            InterPro; IPR000072; PDGF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ji
G
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                                                                                                                                                                                          187 ITVPLSHGPKPVTVSFANHTSCRCMSKLDVYRQVHSIIRRSLP-ATGTQCHVANKTCPKN 245
                                                                                                                                                                                                                          y Match 8.3%; Score 196; DB 6; Length 122;
Eccal Similarity 27.2%; Prod. No. 2.2e-11;
Ecs. 47, Cosservative 27, Mismatches 45; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       292 OVOROGVEY-- ISOGVREE-------ILVASOCOMOKNELLESSOGVNE-EFDEEROVO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              172 CMNISTNYISKILFELIVPLSHGPKPVIVSFANHISGRØMSKILVYRØVHSIIRRSLPAT 231
                                    306 H-KELDRASCOCMCKNKLLPSSCGPNKEFDEERCOCVCKKTCPKHHPLNPAKC 357
                                                                                                                245 HVWNNGTORGI ACHDEGEVSHIGDSCISEGEHTOGENKETDEETOQCVCKGGVRRISCGE 305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       93 C--VPIEEENLIMQIMRIKPHOGOBIGEMSFLOHSKCECEPKKLEARGEKKSIRGK---- 146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               84 HLQEL----
                                                                         59 MIWDSNKCKCVLQEE---
                                                                                                                                                     1 ISVPLISVPELVPVKVANHIGGKGFFIAF--KHFFSIIKKSIQIFEEDRGSHSKKLCPVD 58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ---KSRYKPWSVP/GPCSERFKHLFVQDFQTCKCSCKN--TDSRCKARQLELNERTCRC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               58; Conservative 29; Mismatches
                                                                                                                                                                                                                                                                                                                                 122 AA; 13820 MW; CC504B00E29D54EB CRC64;
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27 214 V
214 AA; 25175 MW:
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----ALCGQHMKFDEDKCECVCKTPCPRDLIGHTENC 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Cetartiodactyla; Ruminantia; Perera: Boveidea;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 VASCULAR ENDOTHFLIAL GROWIH FACTOR 188: 0AC980A158C44B27 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRT;
                                                                             ----NPLAGMEDHT----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    122
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              THOROGENERAR TO 155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 73;
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Job time: 192 see

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Database
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Maximum Match 100%
Listing first 45 summaries
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Maximum DB seq length: 20000000000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pertect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OM protein - protein search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A_Geneseq_1101:*

1: /SIDSR/ucedata/geneseq/geneseqp/AA1980-DAT:*

2: SILSP jeddata/geneseq/geneseqp/AA1987-LAT:*

3: /SIDSR/ucedata/geneseq/geneseqp/AA1987-DAT:*

4: /SIDSR/ucedata/geneseq/geneseqp/AA1980-DAT:*

5: /SIDSR/ucedata/geneseq/geneseqp/AA1980-DAT:*

7: /SIDSR/ucedata/geneseq/geneseqp/AA1980-DAT:*

8: /SIDSR/ucedata/geneseq/geneseqp/AA1980-DAT:*
                                                                                                                                                                          Pebruary 20, 2002, 16:25:45; Search time 42.36 Seconds (without alliamments) 730.940 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gapop 10.0 . Gapoyt o.s
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2354
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STESH Short fact to form one protecting property of the proper
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /STUSB/gcgdata/geneseq/geneseqp/AA1988.DAT:*
/STUSB/gcgdata/geneseq/geneseqp/AA1988.TAT:*
/STUSB/gcgdata/geneseq/geneseqp/AA1988.Tati-*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result		A Lotto					
Z	Score	Match Length DB	ength		ID OIL	Description	otion
1	2354	100.0	418	18	AAW00934	Quail	Flt4 recepto
۸.	2354	100.0	418	<u>_</u>	AAW75743	Quail	vascular end
	1804.5	76.7	419	8	AAW17847	Human	toetal liver
÷	1804.5	76.7	415	<u>-</u>	AAWOO'9 32	Нитап	Fit4 recepto
Jī	1804.5	76.7	419	<u>, </u>	AAW75740	Human	vascular end
•	1804.5	74.7	419	20	AAWB6203	Hilman	n vascular end
7	1804.5	76.7	419	21	AAB10648	Human	VEGC protein
α	1604.5	76.7	415	21	AAB29048		VEGF-C prote
ď.	1804.5	76.7	419	t.J	AAY70749	_	prepro-vascu
1 o	1804.5	76.7	419	21	AAY70982	Human	vascular end
-	1804.5	76.7	419	22	AAH 37605	_	VEGF-C. Hom

M. 7 Pay 1. 17 . 17 11	AAWE 3242		318	1. 1.		<u>.</u> ,
Human prowth facto	VAX08580	13	14.7	1 × 4	557.5	44
Hyran rasmilar and	AARTOLAL	• ;	, i 1 1 	• 5) 020 11	-1	مع تد
Homan VEGE-D. Hom	AAB 17606	:3 :3	754	x	677	r.j
Human VEGF-D1 prot	AAY97573	13	354 4	13 13 13 13 13 13 13 13 13 13 13 13 13 1	677	42
Human vascular end	AAY70983	12	354	8	677	40
Human prepro-vascu	AAY70750	2	354		677	39
Human VEGF-D prote	AAB29049	2	354		677	ند 80
Human VEGD protein	AAB10649	63	354	28.8	677	37
Human vascular end	AAW44293	19	354		677	36
Homo sapiets vastu	AAW5 324 I	19	j.n		677	نب 1. n
Human zveq12 growt	AAW4 9036	19	354	28.8	677	34
Human VEGF-b prote	AAY97572	ta ta	9 <u>22</u> 5	28.8 8	677	نیا نیا
Homo supiens vascu	AAWSB240	<u>.</u>	51 12 12 13	:0	677	i di I di
Human VECE-C trunc	AAW86225	G	292	57.1	1343	<u>ي</u> ا 1
Human VECF of trunc	AAW86224	() ()	297	n co tu	0.56	30
Human VEGF-C trunc	AAW86223	S	302	:n :-	1991	t) G
Human VEGF C trunc	AAW86222	E C	307	60.D	1417	8
Human growth facto	AAY08284	Ö	318	61.7	1453	1.1
Vascular endotheli	AAR82686	16	350	67.9	1599	51
Human VP:Y-2 prote	AAY"7577	:3 :3	275.0	5 10 1	1604	, ,
Trancated vascular	AAY97145	1 3 1 3	350	68.3	16.04	N A
Truncated human VE	AAY22321	03	350	68.1	1604	tu W
A truncated vascul	AAY30519	ы 0	350	6e.1	1604	t 3
Mouse Flt4 recepto	AAW00933		415	74.0	1742.5	21
Mouse vascular end	AAW75742	<u></u>	415	74.2	747	0
Human VEGF-C tull	AAW86237	20	399	74.7	759	19
Human vascular end	AAW11478	1 8	419	76.1	741.	18
Vascular endotheli	AAW75751	5	419		793	17
Human VEGF-B prote	AAY97570	22	419		1794.5	16
Vascular endotheli	AAY97144	21	419		1794.5	15
Full length human	AAY22320	0	419	76.2		14
Vascular endotheli	AAY30518	20	419	76.2	1794.5	3
Human vascular end	AAW1 383 3	\vec{x}	414	76.3		12

AL IGNMENTS

RESULT	JIT 1
AAW	AAWD01934
=	AAWOURS Standard, Tritein: 418 AA.
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Α̈́,	AAWIII) 934;
XX	
3	TD-NoV 1937 (11)st +011;)
XX	
Ŧ	guali Elt4 receptor tyrosine kimase ligand VEGE C.
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ĸ	VEGE 7. Fit1, receptor tyrosine kinase, VEGEP-3; quail;
KΣ	cascular endothelial growth factor receptor 3: liquad;
×Ψ	anglegenesis; wound bealing: lymph vessel; therapy; diagnosis.
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ÖS	Coturnix coturnix.
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PZ	W09705250-A2.
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Pυ	13-FEB-1997.
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판	01-AUG-1996; 96W0-F100427.
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PX	28-JUN-1996; 960S-0671573.
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v P	(UYHE-) UNIV HELSINKI LICENSING LID OY.
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Id	Alitalo K, Joukov V;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       that binds specifically to the EHTA receptor tyrosine kinase (VBSEK-4), stimulating phosphorylation of the receptor, and which modulates the growth of endothelial cells. The sequence was
38661 834 70
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                                         BEEFEL DOLY 30
                                                                                    MODBERSHIP AT
                                                                                                                                                                      lymphalic endothelial cell; myclopoiosis; anglogeneses; inflammation;
lymphalepicacocciu; sedema; elephartiacis; Milroy's discuse.
                                                                                                                                                                                                                                                          <u>waail vaseular endethelial growth taetor C protein.</u>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              correspond to non-human mammalian variants of VEGE-C.
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Leogl Similarity (100.0%) Prod. No. 2,8e-188;
Leo 418; Conservative 0; Mismatches 0; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ctespakettkgkribbetessyrppetvitkredaffilassyctevitswkrplmi 418
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            promoting greath of lymphatic endethelial cells and lymphatic voscels, increasing vascular permeability, and affecting myelopolesis. The products can be used to: stimulating angiogeneses, for inhibiting
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| | 1014|| |
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       418 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0; Gaps
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                                                                                                                                                                             vasculodenesis and andiodenesis. Andiodenesis inhibition or increased vascularisation may be cilinically desirable (e.g. to suppress solid lumour growth or in wound healing, respectively). The IIR-lip can be administered to treat conditions with defective or insufficient (R-1). Polypeptides may also act as carriers to
                                                                                                                                                                                                            or insufficient tlk-1. Polypoptides may also act as carriers to deliver diadnostic/florapoutic agents to colls to which fitt-up binds, to denerate antibudios, and to identify tlk-lbp intipowists
                                                                                                                                                                                                                                                                                                                                                                                                               DNA encoding a human footal liver kinase I binding protein - used to treat conditions with insufficient protein, deriver agents to cells and identity antagonists to treat protein-mediated conditions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Protein
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                                                                                                                                                                                                                                                                                            the mature tikl-bp can be secreted from host cells transformed with an expression sector including an isobated tikl-lbp cDNA clone (see AAA6A8H1). Pik-lbp can be used to isobate cells to which it binds, tor use in studying the roles of such cells and of flk-l in
                                                                                                                                                                                                                                                                                                                                          This polypopedide comprises a human factal liver kinase 1 binding protein (tlk-lbp) (see AAW1783) that binds to the receptor tyrosine kinase (tk-) expressed on gascular empothelial and other pells.
                                                                                                                                                                                                                                                                                                                                                                                          Claim 1; Page 30-32; 43pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Peptide
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human toetal liver kinase A binding protein Ilk-lbp.
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120 STOTEWERT, MERRYCVIII ARROLATINI FREEDOVSTYROGGOONSESIQOMNISTNY 179
                                                                                                                             Local Similarity
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                                                60
                                                                                            1 MHLLEMI.SI.GCCLAAGAVILIGPRQ-PPVAAAAYESGHGYYEEEPGAGEPKAHASKDI.EEQL 59
                    mbliqtisvaestlauallpypreapaauutesgidisdaepdageatayaskdieeqi 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1947-281031/25
                                                                                                                                                                                                  treating tlk-lbp mediated conditions.
                                                                                                                   Conservative
                                                                                                                                                                             419 AA;
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21.135
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/pote= "(Claim 10)"
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21..419
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                                                                                                                            76.7%; Score 1804.5; DB 18; Length 419; 75.7%; Pred. No. 1.9e-142;
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                                                                                                                  Mismatches
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28-JUN-1996;
01-AUG-1995;
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vascular endothelial growth factor receptor-3: ligand:
utdlower.esis; wound bouling, lymph.cosel, lymphangioma:
cancer: metastasis: therapy: diagnosis; antibody; inhibitor
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human Flt4 receptor tyrosine kinase liqand VEGF-C.
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    Prepro_peptide

"preterred active fragment of VEGF-C, retaining FIt4 ligand activity (Claim
                                                                                                                                                     "preferred active fragment of VEGF-C, retaining Flt4 ligand activity (Claim 11)"
                                                                                                                                                                                                                                "preterred active fragment of VEGF-0, retaining Fit4 ligand activity (Claim 10)"
                                                                                                                                                                                                                                                                                                                                                                                     "preterred active fragment of VEGF-0, retaining Flt4 ligand activity (Claim 13)"
                                                                                                                                                                                                                                                                                                        retaining F1t4 ligand activity (Claim 14)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches 318;
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While C, such as antibodies, can be used to control endothelial cell proliteration, c.g. lymphangiona or metastatic cancer.

Monace and quail VEGE C sequences (see AAW00934-35) have also been
AAW75740 standard; Protein: 419 AA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 7; Page 112 113; 183pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                N PSDB: AAT84276
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180 ISKTLEETTVPLSHCPKPVTVSFANHTSCPCMSKLDVYFCVHSTIERSLFAIGTQCHVAN

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Z4 0 KTOPKNHVWNNQTOROLAQHIDESEYSHISDSOTSEEE TOEENKELDEETOECVOROSV 181 lsktiteityrisgapkpytistanktseremsklebyrgyhsiirrstpatlpgegaan

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Onery Match 76.7%; Score 1804.5; DB 19 Best Local Similarity 75.7%; Fred. No. 1.9e-142; Matches 418; Conservative 49; Mismatches 60;
                                                                                                                                                                                                                                                                                                                                                                    They can also be used to stimulate lymphocyte production and maturation and to promote or inhibit trafficking of legeocytes between tissues and lymphatic cessels of to affect migration in and out of the thymns.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              activities affecting growth and migration of vascular endothelial cells, promoting growth of lymphatic endothelial cells and lymphatic vessels, increasing vascular permeability, and affecting myelopolesis. The products can be used for stimulating angiogeneses, for inhibiting angioacnesis, for stimulating lymphangiogenesis, treatment or prevention of inflammation, oedema, elephantiasis, or Milroy's disease. They can
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Flt4: vascular endothelial growth factor C: vascular endothelial cell; lymphatic endothelial cell; myelopoiosis: angiogoroses; inflammation; lymphangiogenesis; oedema; elephantiasis; Milroy's discuse.
                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   also be used to modulate myelopolesis, e.g. treating granulocytopenia. They can also be used for modulating the growth of endothelial cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 1; Page 112-115; 177pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       transplantation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New isolated vascular endothelial growth factor polypeptide(s) used to develop products for treating, e.g. cancers, inflammation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             N-PSDB: AAV52576.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  05-FEH-1997;
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                           1 MHLLEMLSLAFCHAAGAVLLGFRQ-PPVAAAYESGIGYYEEEFRGAGEPKAHASKOLEEGI. 59
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          , gradulocytopenia or for wound healing or tissue
                                                                                                                                                                                                                                                                                                     419 AA;
97US - 0795430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         98WO US01973
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                                                                                                                  Query Match
Best Local Similarity
Matches 318; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                          trancated proteins recombinantly. The truncated VRP subunits, optionally expressed from about therapy vectors, have in the and in titre adjacence activity and are used to stimulate activates in particularly economy collected vessel development in cases of cardiac ischarwis, to stimulate endothelial cell growth and migration in vitre; to treat heart disease; to treat ischarmia (e.d. cardiac, chronic coronary or chronic lower limb ischarmia, struke and peripheral vascular disease); to promote healing of ischarmia, struke and peripheral vascular disease); to promote healing of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               This represents the amino acid sequence of human vascular endothelial growth factor (VEGF)-C protein. The invention provides tripograded VEP (VEGF-related protein) subunits that have at least one amino acid N-terminal to the first dys of the core sequence deleted. Host cells transformed or transferted with expression vectors containing nucleic
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human vascular andothelial growth factor (VEGF)-C sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     arids encoding the truncated VKP subunits are used to produce the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Disclosure: Fig 1: 113pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    andiogenesis, e.g. for treating heart disease and ischaemia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New truncated vascular endothelial growth tactor-related protein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VEGF; VEP; vascular endothelial growth factor; VEGF-related protein;
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                                                                                                                                                                                                                                                                                                                                                                                            wounds (of skin or intestines), and to increase vascular permeability.
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This invention describes a novel vascular endotherial growth factor X (VEGF-X) protein (Ia) and its encoding polynucleoride (Ila) which has vulgerary, cytostatic, antirheumatic, antiarthritic, antipsoriatic and antidiabetic activity and acts as an angloquenesis and vascularization

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Militay Names syndrome: Tymphoedema praecox; VEGE C; vascular endothelial growth factor C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human: Elt4; tms like tyrosine kinase 4; lymphoedema; was classed belief at we had taken on a VETB
26 MAR 1999;
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75.7%; Pred. No. 1.9e-142;
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                                           RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           guery Match 76.7%; Score 1804.5; DE 21; Length 419;
Best Local Similarity 75.7%; Pred. No. 1.9e-142;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 methods of the invention, which involve the screening of individuals to determine which vascular endothelial growth factor receptor 3 (VESFR-3, data known as FIL4 or has like tyresine kinase 4) allolos they possess and thus their likelihood of developing heredicary lymphocdema conditions associated with lymphocdema include Milroy-Nonne syndrome, which is early onset lymphocdema and lymphocdema pracetox, which is late
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (LUDW-) LUDWIG INST CANCER RES
(UYHE ) UNIV HELSINKI LICENSING
(UYPI ) UNIV PITTSBURGH.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Screening a human subject for increased risk of developing a lymphatic disorder, comprises assaying a nucleic acid to determine a mutation
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AAY70749 standard; Protein; 419
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Human prepro-vascular endothelial growth tactor C.

17 · AUG · 2000

(tirst entry)

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Human; receptor tyrosine kisses; RTK; Flt4: fmg-like tyrosine kinase 4; VECFK-1; vascular endothelial growth factor receptor-3; chromosome 5q35; cytosusio tyrosine imaging anti-funeur borpp; treatment diagnosis; neoplastic disease; lymphoma; carcinoma; breast; squamous cell; melanoma; sarcuma; mali-maney; VEGF-C; vascular endothelial growth factor C.
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Homo supiens

Poptide Zabol N terminal_papelds from partially processed /note "cleavage of this peptide from partially processed VERF-C produces a fully processed matrix form of VERF-C of 21-23 kb which has high attibity to VERFR 2" 104...227 /lahel- Signal peptide Location/gnalitiers Mature_VEGF-C

Binding-site /lubel M 228..419 reminiscent of a Balbian fring 4 protein (BR3P) sequence; clearwaye of simual pertide and the 3 tenhina; peptide produces a partially processed from of VEGF-C of about 29 km which has high affinity to Fitt (VEGF-3). /label* c-terminal_poptide

Region (5) to "Night and situalized VENT of the ptotal Night at position 156 is essential for VEGFR-2 binding and 165 is essential for VEGFR-2 and VENTE 3 binding" 131..211

"important for Vest o activity"

M-1200051200-VI

08-0CT-1999; 99W0-US23525

(LUDW-) LUDWIG INST CANCER RES

(UYHE-) UNIV HELSINKI LICENSING LTD GY

Kaipainen A, Valltola R,

Jussila

Treating neoplastic diseases such as lymphoma, carcinomas, melanomas comas, involves administering a compound capable of inhibiting of ligand proteins to fms-like tyrosine kinase-4 receptor -

Example 15-17; Page 140-142; 148pp; English.

and sarcomus. Fit4 receptor tyrosine kinase binding compounds can be used for manufacturing medicament useful for diagnostic screening, imaging and tradhment of malignancies characterised by Fit4-expressing blood cells. The Fit4 gene maps to chromosomal region 5q % and is expressed as 5.8 kb and 4.8 kb meNAs which differ in their 3 sequences and are differentially expressed in HEL and DAMI cell lines. Fit4 becomes to a subfamily of class III receptor tyrosine kinases (RIKs). It is used as a target for tumour imaging and anti-tumour therapy. The present sepacace is a human prepro vascular endothelial growth factor C (VEGF-C), a specific example of Fit4 binding compound. ligand to Fit4 thereby inhibiting Fit4 mediated proliferation of vascular endothelial cells. The compound is useful for treating meroplastic disease such as breast carcinomas, squamous cell carcinomas, lymphomas, melanomas The patent discloses a method to treat reoplastic disease characterised by expression of the Clob losion Figure 1 (ELG) tocched (also referred as vascular endothelial growth factor receptor 3, VECEP-3) in endothelial cells of blood vessels adjacent to malignant neoplasm. The involves administering a compound that inhibits binding of a

Sequence 419 AA

> 9 긪 문 K 子 Ŷ 댗 g 긎 ŞΥ DЬ Query Match Best Local Similarity Matches 318; 240 360 QOF. 181 121 1 MHILLEMIST COOLAAGAVI LOPRO - PPVAAAYESGHOYYEEEPGAGEPKAHASKIILEEOL 59 CECLESCANCELECKER HHQLCSCYRPPCIVETKECDAGFLLAEEVCECVETSWKEPLMN 418 rsvssvdelmtvlypeywkmykeqlrkggwqbnreqanlmsrteetiktaaahynteilk 12: FSVSSVDEI MTVLYPEYWKMEKOOLEKOOWOHNFEHSSSUTFSDUSLKFAAAHYNAFII K. 11s mbllqffsvucsllaaallpqpreapaaaaatesqldlsdaepdaqeatayaskdleeql 60 Sectes paker I kakki bhateseyrrpeturqkaeepatsyseeverevpsywki pams 419 KICHKNRVWNNQICRCLAGHURGESSHIGUSDISHGRB- LCGPNKFIDEFTGGCVCKGGV lskulteituplsqqpkputistanhtseremsklduyrqvhsiirrslpatlpqcqaan ISKTLFEITVELSHGEKEVIVSFANHISCROMSKLDVYROVHSITRRSLPATOIOCHVAN 239 sidnewrktgropseveridaakelqvatuttlkppevssyreqqcrossedqcmutstsy Conservative 76.7%; 75.7%; (9) Mismatches Score 1804.5; 1B 21; Length 419; Pred. No. 1.9e-142; = 60; Indels 3; Gaps

AAY70982 standard; Protein; 419 AA

09-AUG-2000 (first entry)

Human vascular endothelial growth factor (VEGF)-C protein

Vascular endothelial growth factor-C; VEGF; human; re-endothelialisation; vascular endothelial growth factor receptor; VEGFR; vascular trauma; blood vessel; cardiomascular surgery; anti restenosis agent; prevention;

restenosis; stenosis, percutaneous transluminal coronary angioplasty.

Binding-site Binding-site Protein Peptide Homo sapiens Peptide /notes . ∃ VEGF=0 protein (21-23 kD) $^{\rm m}$ 104...227protein (29 kD)" 32..103 /note- "Essential for VEGFR-2 and VEGFR-4 binding" $156\,$ /note-/label- Amino_terminal_peptide /note: "Clejvage results in fu /note= "Cleavage results in partially-processed VEGF-C Location/Qualitiers /label= Signal_peptide "Essential for VEGFR-2 and VEGFR-3 binding" - Mature_buman_VEGF_C
"Processed vascular epithelial growth factor(C") "Essential for VEGFR-2 binding" "Essential for biological activity of protein"

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             used in a method to reduce of prevent restenosis and stenosis of a
vessel following vascular transa e.g., cardiovascular surgery and
percutaneous transluminal coronary angioplasty.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Prezenting stemosis and restemosis in mammals using vascular endothelial growth factor proteins or the nucleic acids encoding them
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               same more
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Yla herttuala S. Alitalo K. Biltonen Mo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S WINDINSH WIA (ZHWIA)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            78 OCT 1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     26 - 17 1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           04 MAY 2000
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                                  (S) CECLESENKCELKOKKEHHIGICSCYFFIGUTENIKRCDAGFILALEEVOKGVERSWKRDIMN 418
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   180 ISKILEETIVELSEGEKEVIVSFANHISCECMSKIDVYKOVESTIKKSLAAIQIQCHVAN 239
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LO SIDIEWRKIGOMEREVIVOLOKEFOATTNIFFKFEOVSIYBOOGCONSEOLOGMNISTNY 179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   6. GANGA MARKA MAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             local Similarity
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                                                                                                                                                                                    2000 450584/40
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                980S 0105587
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/note="Cleavage results in partially-processed VEGE-C
protein (29 kD)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 228..419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               76.7%; Score 1804.5; DB 21; Denom-
75.7%; Prod. No. 1.9e 142;
55.7%; Mismatches 60; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               "Essential for VEGER 2 and VEGER-3 binding"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Jeltsch MM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 21; Length 419;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Achen MC:
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| MHILLEMLSIGCCLAAGAVILIGPRQ-PPVAAAYESGHRYYFEEPGACEPKAHASKDLEEGJ. 59 | HTT | H

76.7%; Score 1804.5; DB 22; Length 419; 75.7%; Pred. No. 1.9e-142;

39; Mismatches

60;

4: Gaps

Host Local Similarity 75.7 Matches 318; Conservative

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AAB 37605
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 11
                                                                    mutation aftering the encoded amino acid sequence or expression of at least I VECEK-3 allele in the nucleic acid correlates with an increased issker developing a lymphatic discrete. Treatment for hereditary lymphadoema can be provided through the administration of vascular endothelial growth factor (VEEF-C) and vascular endothelial growth factor (VEEF-C) and vascular endothelial growth.
                                                                                                                                                                                                                                                                                                                                                                                  Servening a bullan for an increased risk of developing lymphatic disorder comprises assaying nucleic acid for alterations in the sequences expressing vascular endothelial growth factor receptor (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (UPPL-) UNIV PITISBURGH.
(UPPHE-) UNIV HELSINKI LICENSING LID OY.
(LHDW ) LHDWIG INST CANCER RES.
Sequence
                                    tactor b VESE b genes (via gene therapy) and proteins. The present sequence is the protein sequence to VESE-c.
                                                                                                                                                                                                                                                                                                                                              Disclosure; Pages 62-64; 99pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                              WP1; 2001-007762/02.
N-PSDB; AAC68953.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human: gene therapy: lymphatic disorder: hereditary lymphedoema: Fit4: vascular endothelial growth factor receptor 4: VEGFR-3: VEGF-0: VEGF b;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAB37605 Standard; Protein; 419 AA
                                                                                                                                                                         disorder from presence or absence of the mutation. The presence of
                                                                                                                                                                                         (VEGER 3)/fms like tyrosine kinase 4 (Plt4) allele (see AAC68952 and AAB47604) and determining an increased risk of developing lymphatic
                                                                                                                                                                                                                               sequence or expression of vascular
                                                                                                                                                                                                                                               subject to determine a presence or an absence of a matation aftering the
                                                                                                                                                                                                                                                               for an increased risk of developing a lymphatic disorder e.g. hereditary
lymphodocma. The method comprises assaying nucleic acid of a human
                                                                                                                                                                                                                                                                                                         The present invention relates to a method for screening a human subject
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Alitalo K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       16-AUG-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        26 MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                29 SEP-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    26 SEP-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   tms-like tyrosine kinase 4
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ferrell RE,
    419 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         9908-0375248
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A human vascular endothelial growth factor (VEGF)-related protein (VRF) (AAWI 833) has been identified that binds to, and stimulates the phosphorylation of, the receptor tyrosine kinase F114. It is postulated to be a third member of the VEGF protein family. Its amino acid sequence was deduced from a cDNA clone (AAI59329) obtd.
                                                                                                                                    Human protein similar to vascular endothelial growth factor -
to freat e.g. Wounds, tumours, rheumatoid arthritis, Kapesi's
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   receptor protein tyrosine kinase; Flt4; signal transduction; would be think volumearly. The unatid arthritis Kaposi's sare on a
                                                                                        Claim 6; Fig 1A-D; 68pp; English.
                                                                                                                       sarcoma etc.
                                                                                                                                                                                  N-PSDH; AAT59525.
                                                                                                                                                                                                                                                                                                                                                                                                                                       Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     therapy; diagnosis; angiogenesis; monoclonal antibody.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Vascular enderhelial arowth factor-releated protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human vascular endotholial growth tactor endated protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       65 JUN-1937 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAW13833 standard: Protein; 419 AA
                                                                                                                                                                                               WPT: 1997-192902/17.
                                                                                                                                                                                                                                                                                      08-SEP-1995;
                                                                                                                                                                                                                                                                                                                                                13-MAR-1497
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                                                                                                                                                                                                                                                        (GETH ) GENERIFICH INC
                                                                                                                                                                                                                                                                                                                    30 - AUG - 1996 ;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Wood W;
                                                                                                                                                                                                                                                                                      9508-0003491
                                                                                                                                                                                                                                                                                                                  95W0-US14075.
                                                                                                                                                                                                                                                                                                                                                                                                   /note- "deduced residue from nucleotide sequence is tyrosine"
                                                                                                                                                                                                                                                                                                                                                                                                                                                  /label= Mat_protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /label= Siq_peptide
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\begin{array}{c} \mathbf{X} \ \mathbf{P} \ \mathbf{X} \ \mathbf{P} \ \mathbf{X} \ \mathbf{
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                                                                                                                                                                                                         transformed host cells and used: to promote growth of vascular and transformed host cells, to stimulate phaseborylation of the tyrosine kinase domain of a Fild receptor; as a diagnostic; as an additive to sell cultures; to server, for (ant)agonists; and to
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betweenlarisation or vascular fermeability. VRI may make it possible to avoid coronary by-pass surgery by stimulating growth of the collateral circulation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             allergy; asthma;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        deficiencies of disorders may be genetic, somatic, such as cancer or some autoimmune disorders, acquired (e.g. by elemetherapy or toxins), or intections. Examples of immunolestic deliciency syndromes include blood
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  activating or inhibiting the proliferation, differentiation, or mobilization (chemotaxis) of immune cells. The etiology of these immune
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     medical condition. The VEGE-2 polypoptides or polynometerides may be useful in treating detictoncies of disorders of the immune system, by
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             blood pressure, and increase blood flow. The polynucleotides and polypeptides can be used for preventing, treating or ameliorating a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    VEGE 2 polypoptides stimulate the growth of vascular endothelial cells.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 12: Fig 1A-E: 222pp: English
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                allergic asthma) or other respiratory problems, may also be treated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Similarly altergic reactions and conditions such as asthma (particularly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         stimulate endothelial cell migration, stimulate angiogenesis, decrease
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Administration of observar endethelial growth factor 2 (VESF 2) to a patient can be used for treather injury or degeneration of photoreceptors associated with e.g. angloid streaks, retinitis piamentosa, age-related machiar degeneration, diabetic retinopathy, etc. VESF-2 promotes anglogenesis, the formation of new blood
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Treating injury or degeneration of photoreceptors comprises administering to a subject vascular endothelial growth factor 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Rosen CA, Alderson P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Vascular endothelial arowth tactor 2 (VEGE-2)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (VEGF-2)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             08-FEH-1999;
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                                                                                                        120 SIGGEMPROGAGERY OF STREET STREET AND STREET STR
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                                                                                                                                                                                                                                                                                                                               60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity
| sidnewikygemprevolegebetevatattikppwwwyreggennsoglegmatatsy 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MHILLIMI.SIJOCI.AAGAVILJOPKO: PPVAAAYESGHJYYEEEEPGAJEPKAHASKDLEEGI. 59
                                                                                                                                                                                                                 rsvssydelmtvlypeywkmykeqlrkggwghnreganlnsrteetikfaJahynteilk 120
                                                                                                                                                                                                                                                                                                                         RSVSSVDELMTVLYPEYWKMEKCQLRKGGWQHNREHSSSDTRSDDSLKFAAAHYNAEILK 119
                                                                                                                                                                                                                                                                                                                                                                                                                       mhslyffsvərsilaballpypreapaaaaafesyldisdaepdageatayaskdleegl 60
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9908-0137796
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         76.2%: Score 1794.5; DB 21: Length 419; 75.2%: Pred. No. 1.3e-141;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Melder R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   40; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Roschke V.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61; Indels
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        Qy
        180 TSKTIFFTTV/CSHAPKPVTVSFANHTSOFO/MSKIJVVPP/MSTIFPST-ATGJTG/HVAN 249

        Db
        181 ISKTIFFTTV/CSHAPKPVTVSFANHTSOFO/MSKIJVVPP/MSTIFFSTJ-ATGJTG/HJAN 240

        Db
        181 ISKTIFFTTV/CSHAPKPVTVSFANHTSOFO/MSKIJVPP/MSTIFFSTJ-ATGJTG/HJAN 240

        Qy
        240 KTGPKNHVWNNQLGRGIAAGHDFGESSHIGDSDTSBJEH-IGGPNKELLERFTG/CVCKGGV 298

        LH
        15 H

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Search completed: Pebruary 20, 2002, 16:25:46 Job time: 315 sec

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 SPIKEMBL_|7:*

1: Sp_archoa:*

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5: Sp_invertebrate:*

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9: Sp_phage:*

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Copyright (c) 1993 - 2000 Compages Ltd.
sp_plant:*
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sp_vertebrate:*
sp_unclassified:*
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Pred No is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Ouery Match	ouery Match Length DR	무	41	Description
_	2017 5	L L K	420	•	, exx	028050 608 tainas
2	1762.5	75.5	418	<u></u>	057352	Α.
,	696	24.8	354	4	043915	043915 homo sapien
4	689.5	29.6	3.58	::	P97946	P97946 mus musculu
У г	689	29.5	126	_	035757	
Ŷ	658.5	138 13	978	::	035251	035251 rattus norv
7	274.5	11.8	1704	ŢЛ	Q94446	QD4446 chironomus
38	260	11.1	1698	υī	C94438	Q94438 chironomus
ۍ	231	9.9	7.17	4	Q9H1W9	Q9h1w9 homo sapien
10	231	6.4	254	حد	Q16889	Q16889 homo sapien
11	13 13 15 15 15	9.5	214	c	EAAW60	QUmyv3 canis famil
12	221.5	4.5	208	5	Q9XSF4	Quysf4 canis famil
- 1	217.5	9.3	209	42	060720	060720 homo sapies
1.4	217.5	9.3	214	œ	CHXXRD2	Q4xsf5 canis famil
15	214.5	9.2	190	c	C9XSF3	©9xsf3 canis famil
16	212.5	9.1	150	5	Q9GKR0	Q94kr0 equus cabal
17	208.5	8.5	190	Τ.	C9CL52	©04152 Sus scrota
<u>.</u>	205	æ . æ	122	6	∪9GI.X1	Q9qlxl bos taurus
19	NO C	, J	, .	_	1 n 1 l	California Menerals lac

Objxd6 rattus norv	11 040XG6	146	7.3	169.5	45
Q9qw∃0 rattus sp.,	11 <u>0</u> 90W30	2471	7.3	170	44
(9)kx7 rattus borv	11 C9JKX7	170	7.4	171.5	43
©9hz40 homo sapien	4 09H240	2471	7.4	172	4.2
©04721 hama supien	4 004721	0471	- 1	172	4.
Q9mabl ovis aries	6 \Q9M2B1	118	7.4	173.5	40
Q9vb78 drosophila	5 Q9VB78	800	7.5	176	99
Ç9bdp? macaca mula	6 Q9EDP7	20g	: 1 : :	176	38
061240 halocynthia	5 O61240	2352	7.6	176.5	37
ý9xs48 bos taurus	6 Q9XS48	188	7.7	179.5	36
042571 xenopus lae	13 042571	148	7.7	179.5	ς: Ch
Q9vwp6 drosophila	5 Q9VWP6	301	7.7	180	34
09qko0 callithrix	6 Q9GKÜÜ	124	7.7	180	تيا ني
054881 rattus norv	11 054881	150	7.8	181.5	32
Querl6 mesecricetu	11 Q9ERL6	142	7.9	184	31
Q9uh58 homo sapien	4 Q90H58	147	7.9	184.5	30
Q9h1₩8 homo sapien	4 Q9H1W8	171	8.0	187.5	29
o74567 trichoderma	3 074567	704	α	188.5	28
Q9b1x1 drosophila	5 09BLX1	314	∞ 	188.5	27
073682 brachydanio	13 073682	188	œ 	188.5	56
Q99psl mescericetu	11 644bS1	190	œ i⊍	190.5	25
y9u123 homo sapien	4 0901.23	174	œ .4	195	24
Q9qxq7 rattus norv	11 090 x 67	214	8.4	196.5	23
075875 homo sapien	4 (175875	191	.e	199.5	tu tu
Object sparax lead	11 68X060 11	190	æ. o	199.5	21
077643 ovis aries	6 077643	190	8.6	199.5	20

ALIGNMENTS

Pred to lle-186; 27. Mismatches 29, 1 PREAP-ATVAAPESGLAFPSEAFPDG 	1 MHLLGFCSV	
prod No. 1.1e-186; 27. Mismatches 29, Indels 5, PREAP-ATVAAFESGLAFSEARPDGGEVKAFFGKULEF		2
Prod. No. 1.1e-186; Prod. No. 1.1e-186; 27, Mismatches 29, Indels 5,	1 MILLOFLSI	Ϋ́
87.8%: Score 2047.5: DB 6: Length 420:	Query Match Rest Local Similarity 85.5% Matches 359, Conservative	M P C
420 AA; 4668) MW; 58BA84317A3C8E20 CRC64;	SEQUENCE 420	ÇŞ
420	CHAIN 21	FT
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	Signal.	×Σ
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	PROSITE; PSOU2	문
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19; PDGF; 1.	Professor Propies	콧
PDGF; 1.	Ptam; PF00341; PDGF; 1.	둦
10072; PIGF.	InterPro; IPR000072; PDGF.	문
VPP.	HSSP; P15692; IVPP.	ž
FAA77687.1;	EMBL; AH004275; BAA77687.1;	DR R
Submitted (MAY 1997) to the EMRL/Abundank/INBT databases.	Submitted (MAY	Ξ
	"Structure and	RT.
Liu X., Yonekura H., Yamaqishi S., Yamamoto Y., Yamamoto H.;	Liu X., Yoneku	RΑ
	TISSUE-HEART;	RC
A .	SEQUENCE FROM N	₽P
	[1]	RN
	NCBI_TaxID=9913;	္က
ie, Bos.	Bovidae, Bovinae, Bos.	8
Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovoidea;	Mammalia; Euth	8
izoa; Chordata; Craniata; Vertebrata; Euteleostomi	Eukaryota; Met	S
	Bos taurus (Bovine).	ွင္တ
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"Avian VEGE C: etoning, embryonic expression pattern and stimulation of the differentiation of VEGEK2 expressing endothelial cell precursors.";
heyeloguent 125:243-252(1998).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Probom: PD001629: PDGF; 1.
SMAR1: SM00067: GHA; 1.
SMARC: SM00141: PDGF; 1.
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InterPro: IPRO00476; Glyco_hormone.
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Eukaryota; Metazoa; Chordaia; Craniata; Vertebrata; Euteleostomi;
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04 3915;
01 - JUN - 1998
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Yamada Y., Nezu J., Shimane M., Hirata Y.;
"Molecular cloning of a novel vascular endothelial growth factor,
VEGE-D.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Rossi E., Ballabio A., Zuffardi O., Oliviero S.; "Baman FIGF. cloning, gene structure, and mapping to chromosome Xp22.1 between the PIGA and the GRPR genes.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Eukaryota: Metazoa; Chordata; Craniala; Vertebrata; Euteleostomi;
Mammalia; Euthoria; Primates; Catarrhini; Hominidae; Homo.
NCBL_TaxID-9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-JUN-1998 (TrEMBLIEL 06, Created)
01-JUN-1998 (TrEMBLIEL 06, Last sequence update)
01-JUN-2001 (TrEMBLIEL 17, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDIINE 98118549; PubMed 9435229;
Achen M.G., Jeltsch M., Kukk E.,
Alitalo K., Stacker S.A.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MERLINE 98140120; PubMcd 9479493;
Rocchiqiani M., Lestingi M., Luddi A., orlandini M., Franco B.
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                                                                                                                             Y12864; (AA7+471.1);
Y12865; (AA7+471.1);
JOINED.
Y12865; (AA7+471.1); JOINED.
Y12867; (AA7+471.1); JOINED.
Y12868; (AA7+471.1); JOINED.
Y12868; (AA7+471.1); JOINED.
Y12869; (AA7+471.1); JOINED.
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                               D89630; BAA24264.1; -.
AJUUUU185; CAA03942.1;
Y12863; CAA73370.1; -.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Kukk E., Maekinen T., Vitali A., Wilks A.F.,
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                       MFDLINE-97030254; PubMed-8876195; ordandini M., Marconcini I., Forruzzi E., Oliviero S.; "Identification of a c-los-induced dene that is related to the
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"Molecular cloning of a novel vascular endothelial growth factor,
VEH-D.";
                                                                                                                                                                                                                                                                                                                                             platelet-derived growth factor/vascular endothelial growth factor
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Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
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Enkaryota: Metazoa: (
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01-MAY-1997 (TEEMBLECL 03, Last sequence update)
01-JUN-2001 (TEEMBLECL 03, Last sequence update)
VASCULAR FRIVILEDITAL CREWITH FACTOR D (C.E.S. LREUCHE SECWIH FACTOR)
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Genomics 42:483-488(1997)
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                                                                                                                                                                                                                    SEQUENCE FROM N.A.
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Best Local
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Plam: PRO0341: PNGE: 1.
ProDom: PN001629: PNGE: 1.
SMART: SM00141: PNGE: 1.
PROSITE: PS00249: PNGE: 1.
PROSITE: PS50278: PNGE: 1.
                             NON_TER
                                                                                                                                                                                                                                                                                                           STRAIN-SPRAGUE-DAWLEY; TISSUE-LUNG;
Mandriota S.J., Pepper M.S.;
Submitted (TDN 1997) to the FMBL/Senkank/TVBJ databases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           01-JAN-1998 (TrEMBLrel. 05, Created)
01-JAN-1998 (TrEMBLrel. 05, Last sequence update)
01-JUN-2001 (TrEMBLrel. 17, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Eukaryota; Metazoa;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       VASCULAR ENDOTHELIAL GROWTH FACTOR C (FRAGMENT).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     035757
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SEQUENCE
                                                                                         PROSITE: PS50278; PDGF_2; 1
                                                                                                                              SMART;
                                                                                                                                                         ProDom;
                                                                                                                                                                                       Pfam; PF00341; PDGF;
                                                                                                                                                                                                                        InterPre:
                                                                                                                                                                                                                                                   HESP; P15692; 2VPF.
                                                                                                                                                                                                                                                                                    EMBL; AF010302; AAB63248.1;
                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NCBI_TaxID-10116;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Rattus morregious (Rat)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             295 OFFICKESLESCOMKHKIFHPDTUSCEDROPFHTRTCASRKBACHKHWRFPKE 346
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            356 C-ECIENTQKCFLKGKKFHBQTCSC-----YRKPCANKLKHCDPGLSFSEE 400
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           177 ISKILEPTI VPLSOOPKPYTISFANHTSCROMSKLIVYPQVHSIIRPSI PA-II,PQCQAA [235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        46 EQQIRAASSLEELLQIAHSEDWKLWRCKLKLKSLASMUSRSASHRSTRFAATFYDTELLK 105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 57 EEQI RSVSSVDELMSVLYPDYWKMYKCQLEKGGWQQPTLNTFTGDSVKEAAAHYNTEILK 116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TSKQCEPTSVPCCSVPELVPVKIANHTGSKCLPTGP--VHPYSIIPVSIQTPPFDFOVHS
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                                                                                                                       sm00141; PDGF; 1.
                                                                                                                                                                                                                 IPR099072; PDGF.
126 AA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRELIMINARY;
                          126
13977 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Chordata: Craniata; Vertebrata: Euteleostomi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        29.68;
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Fred. No. 1.1
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8F365AFBC4E037B0 CRC64;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   126 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .5; DB 11; Length 358;
[..8e-57;
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Query Match Best Local Similarity Matches 123;

29.5%; 97.6%;

DB 11; Length 126;

Conservative

2. Mismatches Score 689; DB 11: Pred. No. 5.8e-58;

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Gaps

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Obery Match 24,28; Secret 68,5; DB-1 Best Local Similarity 39,1%; Pred. No. 1,4e-54; Matches 127; Conservative 54; Mismatches 88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.852517
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Genomics 42:484 488(1997)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Yamada Y., Nezu J., Shimane M., Hirata Y.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDIANE 97849118; PubMed 9205122;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Raftus norvegious (Raf).
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0) JUN 2001 (TrEMBLIEF, 17, Last annotation updat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  "Molecular cloning of a novel vascular endothelial growth factor,
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                                  354 CAC ECTENION FINANCESEMPTO 377
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                                                                                                                                                                                                        294 GERPSSCAMBKELDKOSCOCYCKNKLEINSCGANKEEDENICQCYCKKICIKNQPENRGK 353
                                                                                                                                                                                                                                                                                        THE RESERVE OF THE WITH THE PROPERTY OF THE PR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    117 STONEWRKTGCMFREDCTIDVGKEFGAAINTEFKPFTVSVYRCGGCONSEGLGCMNISTGY 176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            46 EQQTRAASTLEELIQVAHSEDWKLWRCKLALKSLANVDSKSTSHRSTRFAATFYDTETIK TUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             57 EEQLESOSSONES MSOTYPHONEMEMAKSOLISKS DWOODS LENIKIGES OKE AAAHYNTEILK 115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AANKIS SI SI BYVWINYM SI AQQOO SI SYSINVIOLOSI NGEHIJACONKIDLIEDED SQOVCKO
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                                                                                                                                            HALL TIVE
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Best Local Similarity 25.4%; Pred. No. 3.6e-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SP220.
Chiroconus thummi (Midge),
Chiroconus thummi (Midge),
Chiroconus thummi thummi (Midge),
Plerydota; Metazoa; Arthropoda; Trachesta; Hexapoda; Insecta;
Plerydota; Neoptera; Endopterydota; Diptera; Nematocera;
Chirocomoidea; Chirocomidae; Chirocominae; Chirocomus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Q94446
                                                                                                              sp185.
Chironomus pallidivittatus (Midge).
                                                                                                                                                                                                                                094448:
01 FEB-1997 (TrEMBLIGE, 02, Greated)
01-FEB-1997 (TrEMBLIGE, 02, Last Sequence update)
01-JUN-2001 (TrEMBLIGE, 17, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TISSUE SALIVARY GLAND: Case S.F., Cox C., Hell W.C., Hottman R.F., Martin J., Hamilton R.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        01-FEB-1997 (TrEMBLrel. 02, Greated)
01-FEB-1997 (TrEMBLrel. 02, Last sequence update)
01-JUN 2001 (TLEMBLrel. 17, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                               Q94448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1361 AGOSWOSQ1CQC---SCPATGK-C1GAQFWCAKQCKCV 1394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYO K ECTROMATRASCOPKKSWNRUSCSOPCKSKMRGGOTRSNOOWNCETCKCHCS-GTQTC-17-1460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1195 EGGQKWNDNGCQCGCFTFAFICSASGKYSNVTCSCGCNFGMPAKGCFGNQVWCENSCQCV-1254
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PROSITE: PS01186: EGF_2: UNKNOWN_1.
SEQUENCE 1704 AA; 185745 MW; 3A3F20247CBF1E28 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     InterPro: IPR000561; EGP-1ike.
InterPro: IPR000853; Mtllthion_nemat.
PKINTS: PR00876; MTNEMATOJE.
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                                                                                                                                                                                               185 KDA SILK PROTEIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1135 CKGPNEKPGI SCCKGKGKCFCPVI×'SCKGKSFKFANGCI-GVQEWNELFKCKGECPKDKSKFIC 1194
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AQQEPTEY SINVERDES INCHIDAL CHAREFTER FOLLOW, PROTESTOR FOR BETTER FOLLOWING STORY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ------KTCPTNYVWNYMCKCL 253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               86;
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                                                                                                                                                                                                                                                                                                                                                                                                   PRT; 1698 AA
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Enkaryota; Metazoa; Arthropoda, Tracheata, Hexapoda, Insecta; Pteryqota; Neoptera; Endopteryqota; Diptera; Nematocera; Chironomoidea; Chironomidae; Chironominae; Chironomus.

NCBI_TaxID 7151;

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Matches 91; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
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Case S.L., GOX C., Bell W.C., Holfman R.T., Martin J., Hamilton R., Submitted (AFF-165) to the TMRU AFF-06-1 deficiency (AFF-165) to the TMRU AFF-06-1 page 1 deficiency (PRODOSS) MILLEDIOL Demat.
InterPro: [PRODOSS] MILLEDIOL_Demat.
PPINTS: PRODOSS: MILLEDIOL_Demat.
                                                     Submitted (GFC-2000) to the FMRL/GenBank/DDBJ databases EMBL, AL136131; CAC19512 1; InterPro: IPR0000722 PDGF: Pram: PF00441 PDGF: ProDom: PD001625; PDGF: 1.
SMART SM00141; PDGF: 1
                                                                                                                                                                                                                                                                                                                                          01 MAR-2001 (TERMBLEEL 16, Created)
01-MAR-2001 (TERMBLEEL 16, Last Sequence update)
01-JUN-2001 (TERMBLEEL 17, Last annotation update)
DJ26102+6-4 (VASCULAR ENDOTHELIAL GROWTH FACTOR)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1348 SPKTWDFKSCSC---OCHKNWADDKGGCNAGBIWDDATGSEKGAAVP 1438
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NCBI_Tax1D=9606;
                                                                                                                                                                                                                                                                                Homo sapiens (Human).
Eukaryota: Metazoa: Chordata: Cianiata: Vortebrata: Eutoleostemi;
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                                                                                                                                                                                                      SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                 Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo
                                                                                                                                                                                                                                                                                                                           VEGF
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EFDENTCQCVC--KRTCPRNQPLNPGKC-------ACECTENTQKCFL 367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Q------GMNTSIGYLSKILFELTVPLS-----QCPKPVT----ISFANHTSC 205
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illarity 22.1%; Pred. No. 8.5e 16;
Conservative 42; Mismatches 126; Indels 148; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                  PPELIMINARY;
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  FB49F364446F4D01 CRC64;
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RESULT 10
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                                                                                                                                                                                                            Matches 63:
                                                                                                                                                                                                                                Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-NOV-1996 (TIEMBLIGEL 01, Created)
01-NOV-1998 (TIEMBLIGEL 08, Last sequence update)
01-NOV-1998 (TIEMBLIGEL 17, Last annotation update)
01-UN 2001 (TIEMBLIGEL 17, Last annotation update)
VASCULAR ENDOTHELIAL GROWTH FACTOR (FRAGMENT).
                                                                                                                                                                                                                                                                                                                                  PROSITE: PS50278; PDGF_2; 1.
NON_TER 1 1
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EMBL; S85192; AAC:63102.1; -.
EMBL; S85224; AAC:63101.1; -.
EMBL; S85199; AAC:63101.1; JOINED.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        of RNA."
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EMBL; S85222; AAC63101.1; JOINED.
HSSP, F15692; 2VPF.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Provide K.A., Ferrara N., Winer J., Cachianes G., Li B., Leung D.W.; "The vascular endothelial growth factor family: identification of a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A. MEDLINE=92168017; PubMed=1791831;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens (Human).
Eukaryota: Metazoa: Chordata: Craniata: Vertebrata: Euteleostomi:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Q16889;
                                                                                                                                                                                                                                                                                                                                                                                                                      ProDom;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       fourth molecular species and characterization of
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                                                                                                                                                                113 EILKSIDNEWEKIQCMEREVOIDVGKEFGAAINIEFKEPOVSVYROUGCONSEGLOOMNI 172
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233 QAANKTOPTNYVWNNYM-CHOLAQQDFIFYSNVEDDSTNGFHDVGGPNKELDEDTOQGVC 291
                                       120 SESNIIMDIMRIKE--HUSQUIGSMSELQUNKTEDERKKDEAPDERKSVEGK-----OKG 172
                                                                                   173 STGYLSKTLEEITVPLSQGPKPVTISFANHTSGPGMSKLPVYPQVHS11FRSLPATLPQC 232
                                                                                                                                                                                                                             y Match 9.9%; Score 231; DB 4;
Local Similarity 26.8%; Pred. No. 5.3e-14;
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                                                                                                                           61 EVVKFMD-VYQRSYCHPIETLVDIFQEYPDEIEYIFKPSCVPLMRCGGCCNDEGLECVPT 119
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                                                                                                                                                                                                                                                                                                                 254 AA; 29461 MW; 0690FE9E9723DBA8 CRC64;
                                                                                                                                                                                                          Conservative
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OTRACTION (TEMMETER) 12, Created) OF NOV 1999 (TEMMETER) 12, Last sequential JUN 2001 (TEMMETER) 17, Last anno
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01 of 2000 (TEMBLEL, 15, Last sequence update)
01 JHN 2001 (TEMBLEL, 17, Last amotation update)
VASCULAR ENDOTHELIAL GROWTH FACTOR 188 PRECURSOR.
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                                                                                        CBXSF4
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PROSTIE: PSD0249; PD0F 1: 1.
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Plam; PFO0341; PDGE; ].
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EMBEL AJI (758. CABBZ426.1,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    bearing dogs."
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Mammalia; Eutheria; Carnivora; Fissipedia; Canidae; Canis.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
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                                                                                                                                                                             Taa OfferNERLORG 50a
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                                                                                                                                                                                                                                                                              2/1 GEHDVCGPNKELDEDTOCVCKOGLEPSSEGFEKEL: - DRDSOGCVCKNKLFPNSCIAN 327
                                                                                                                                                                                                                                                                                                                    169 CMNTSTCYLSKTLEETTVPL +
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     y Match 9.5%; Score 222.5; DB-6; Length 214;
Local Similarity 25.5%; Pred. No. 2.8e-13;
does 64; Conservative 26; Mismatches 64; Indels 97; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  29.2 KOST, RESSOCIETKE
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                                                                                        PRELIMINARY;
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                                                                                                                                                                                                                                                                                                                                                                                   ENTIMOTMETAPHOGORIGEMSELQHSKCECKPKKURAKOEKKSTRG 145
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                   last annotation update)
                                    Last sequence update)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          01-AUG-1998 (TrEMBLIEL 07, Created)
01-ANY-1999 (TrEMBLIEL 10, Last sequence update)
01-JUN-2001 (TrEMBLIEL 17, Last annotation update)
VEGF18 PROTEIN PRECURSOR (VASCULAR ENHOLHBILIAL GROWTH FACTOR 183)
(JAI261623.6.6) (VASCULAR ENDOTHBILIAL GROWTH FACTOR).
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Eukaryota: Metazoa: Chordata: Craniata: Vertebrata: Enteleostemi;
Mammalia, Entheria: Carnivora: Fissipedia: Canidae: Canis.
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FROSTIE: FS00249; FDGF_1; 1.
PROSTIE: PS50278; PDGF_2; 1.
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Submitted (MAR-1999) to the EMHL/SenBank/DDBL databases
EMBL: AF133249; AAD29683.1;
                                                                                                                                                                                                                                                                          "Identification and characterization of a new splicing variant of vascular endothelial growth factor: VEGF184."; Biochim. Biophys. Acta, Gene Struct. Expr. 1443:400-406(1998).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota: Metazoa: Chordata: Chaniata: Vertebrata: Enteleostomi:
Mammalia: Entheria: Primates: Catarrhini: Hominidae; Homo.
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Williams S
                                 SEQUENCE FROM N.A.
                                                                                                   Submitted (MAY-1998) to the EMBL/GenBank/DDBJ databases
                                                                                                                                         Jingjing L., Roque K.S.;
                                                                                                                                                                          TISSUE- RETINA;
                                                                                                                                                                                                           SEQUENCE OF 114-209 FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                       MEDLINE-99096474; PubMed 9878851;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TISSUE KIUNEY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               166 -
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            169 CMNISTGYLSKILFEITVPL----SQGPKPVITSFANHTSCRCMSKLDVYRQVHSTIRR 224
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                                                                                                                                                                                                                                                                                                                                                                                         ., Jiang A., Pei D.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    208 AA; 24400 MW; CF77AC591F5C2BBE CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        nilarity 26.5%; Pred. No. 3.4e-13; Conservative 27; Mismatches 71;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      9.5%; Score 221.5;
26.5%; Pred. No. 3.
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Best Local Similarity 25.6
Matches 62; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Hest Local Similarity
Matches 60; Conserv
                                                                                                                                                                                                                                      InterPro: IPROUDO72: PDRF. Ham: PFU0441: PDGF: 1.
ProLow; PLU01639: PDGF: 1.
SMART: SMU0141: PDGF: 1.
PROSTIE: PSS0778: PDGF_2: 1.
PROSTIE: PSS0778: PDGF_2: 1.
PROSTIE: PSS0778: PDGF_2: 1.
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01-NoV-1995 (ItEMBEREL 12, Created)
01-NoV-1995 (ItEMBEREL 12, Last sequence update)
01-JUN-2001 (ItEMBEREL 17, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Submitted (DEC-2000) to the EMMI/CA-0F-08/7000 idetaleses EMMI/ AJ010448; CAA09179.1; -. EMMI/ AF062645; AAC16740.1; -. EMMI/ ALI36341; CAC19514.1; -. EMMI/ ALI36341; CAC19514.1; -. HSSE: P15692; 2VPF.
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                                                                                                                                                                                                                                                                                                                                                                                                                                              Trusting L., Roque R.S.;
Submitted (MAE 1995) to the EMRE/Sected Albertaleses
EMRE, AFI $250, AAR29684.1:
HSSP, PI5692, 2VPE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota: Metazoa: Chordata: Craniata: Vertebrata: Euteleostomi:
Mammalia: Eutheria: Carpivora: Fissipedia: Canidae: Canis.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       I ISSUE-HEART;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                HYNTETI KSTINEWEKTQCMEMEMEVCTIVQAKERQAAINIFFKEPCQVSVYKCGGCCNSEGIQ 168
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26.2%; Pred. No. 8.1e-13;
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                                                                                    9.38; Score 217.5; DB 6; Length 214: 25.68; Pred. No. 8.3e~13; ative 26; Mismatches 75; Indels 79
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VEGE183 PROTEIN.
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Best Local
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SMART: SM00141; PDGF: 1.
PROSITE: PS00249; PDGF_1: 1.
PROSITE: PS50278; PDGF_2: 1.
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Mammalia; Eutheria; Carnivora; Fissipedia; Canidae; Canis.
MCPI_TaxID-9615;
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01-NOV-1999 (ITEMBLIc), 12, List sequence update)
01-JUN-1001 (TEMBLIc), 17, List statistics quant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            InterPro; IPR00J072; PDGF.
Pfam; PF00341; PDGF; 1.
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                                                                           284 EDTOG VOKGOLEDSSOSPEKEL - - PERSOCOVOKNKLEPNSOGANK-EFDENTOGO 337
                                                                                                                                                                                                                                              224 SLPATLPÓGOAANKIGPTNYVWNNYMCRCLAQOBFIFYSNVEBBSTNGFBBVGGFNKELD 283
                                                                                                                                                                                                                                                                                                                                                                                                              169 CMNTSTGYLSKTLFEITVFL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             169 CMNTSTGYLSKILFELIVEL----SQGEKEVIISFANHISCKCMSKLLVVERQVHSTIRE 223
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                                                                                                                                                                                                                                                                                                                              93 CVPTEE-----FNITMQIMRIKPHQGQHIGEMSFLQHSKCECKPKKDRAKQ------ 188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  34 HEFFHEVVERMINVYVERSYNRPTENT VINTEVERYDDITEV TEKDENVOLMEN VONNIVENTEN 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      34 HKPHEVVKEMD-VYQRSYCRFIEILVDIFQEYPDEIEYIFKPSCVPLMBCCGCCNDEGLE 92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             h 9.2%; Score 214.5; DB 6; Length 190; Similarity 24.8%; Prod. No. 1.4c-12; 59; Conservative 25; Mismatches 59; Indols 95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 190 AA; 22292 MW; 2053500EC9085CE0 CFC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Roque R.S.;
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·····REKHLEVODPOTCKCSCKNT···ISRCKARQLELNEKTCRC
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Search completed: February 20, 2002, 16:27:08 Job time: 191 sec

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Copyright (c) 1993 - 2000 Compugen Ltd.

OM protein - protein search, using sw model

Run on: February 20, 2002, 16:24:42; Search time 17:06 Seconds

(without alignments)

891.905 Million cell updates/sec

Title: US-09-534-376A-11

Pertect score: 2334
Sequence: 1 MHLLCFLSLACSLLAAALIP.......SPSEEVGRCVPSYWKKPHLN 415

Searched: 10059 seqs, 46564827 residues

Total number of hits satisfying chosen parameters: 100059

Maximum DB seq length: 0
Maximum DB seq length: 2000000000

Post processing: Minimum Match 1008
Listing first 45 summaries

Latabase: SwissProt_39:*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

		e			SORIMAN 11.5	
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- 1-			2/04	- ,-	NOTC_DROME	P07207 drosophila
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5 homo sapien	P04275	VWF_HUMAN	,_	2813	6.C	141	45
	F1003	TENA_CHICK		1808	6.0	141	44
	Q0700:	NTC1_RAI		2531	6.1	142.5	43
6 sus scrota	029116	TENA_FIG	_	1746	6.1	142.5	4
	P05556	ITB1_HUMAN	_	798	on 1.1	144	41
9 strongylo	P1007	FBP1_STRPU	-	1064	6.2	144.5	40
	P3043	FUR2_DROME	<u>-</u>	1680	6.2	145	39
6 homo sapier	P35556	FBN2_HUMAN		2911	6.2	145.5	38
	Q6155	FHN2_MODSE	-	2907	6.2	145.5	37
	P1458	LI12_CAEEL	_	1429	6.2	145.5	36
	P1260	ITB1_XENLA		79 H	6.2	145.5	3.5
4 mus musculi	061557	FBN1_MOUSE	_	2871	6.3	146	34

ALIGNMENTS

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                        "A novel vascular endothelial growth factor, VEGE-C, is a ligand for
the FITA (VEGER 4) and KEP (VEGER 2) receptor tyrosise kinases.";
                                                                                                      Joukse V. Prinsels K. Kaipaiden A.,
Saksels e., Kilkkinen N., Alligie K.,
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Pred. No. 5.8e-179;
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                                                                                                                                           Chiley D., Lablisen I., Kakk E.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.

FILZ L. MOTTIS J.C., Towler P.S., Long A.J., Greco R.,
FILZ E. Giannotti J., Clarletta A., Hennessey D., Kovacic S.,
Filzgerald M., Scaltreto H., Weich N., Neben S., Finnerty H.,
Filzgerald M., Scaltreto H., Weich N., Neben S., Finnerty H.,
Filzgerald M., Scaltreto H., Weich N., Neben S., Finnerty H.,
Filzgerald M., Scaltreto H., Weich N., Neben S., Funner K.,
Many J., Nickbarg E., Gassaway R., Turner K.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    "Vascular endothelial growth factor-related protein: a ligand and specific activator of the tyrosine kinase receptor FIT4."; Proc. Natl. Acad. Sci. U.S.A. 93:1988-1992(1996).
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MEDLINE 96 (12526; Pubmed 8700872;
Lee J., Gray A., Yuan J., Luoh S. M., Avraham H., Wood W.L.;
Lee J., Gray A., Yuan J., Luoh S. M., Avraham H., Wood W.L.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDLINE 96203094; PubMed 8612600;
Johkov V., Pajissla K., Kaipathon A., Chilov D., Labtinon J., Kukk E.,
Saksola O., Kaikkinen N., Alitalo K.;
EMBO J. 15:1751-1751(1996).
                                                                                                                                                                                                                                                                                                 SMARL: SMOUL41; PIXE: 1. PROSITE: PS00249; PDGF_1; 1. PROSITE: PS50278; PDGF_2; 1.
                                                                    SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                     Probom: PD001629; PDGF; 1.
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                                                                                                                                                                                                                                                                                                                                                                                                         InterPro: IPR002400; GF_cysknot
InterPro: IPR000072; PDGF.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Submitted (JUN-1996) to the EMBL/GenBank/Dibkl databases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Wood C.R.;
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                                                                                                                          LUTTERNA ...
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ·!· SUBUNIT: HOMODIMER; DISULFIDE-LINKED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          -!- FUNCTION: GROWTH FACTOR ACTIVE IN ANGIOGENESIS, AND ENDOTHELIAL
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                                                                        414 AA
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365
175
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                                                                        46883 MW;
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N LINKED (GL'NAC):
N LINKED (GL'NAC):
N LINKED (GLA'NAC):
Score 2048; DE 1;
Pred. No. 3.20-156;
                                                                                                                                                                                                                            VASCULAR ENDOTHELIAL GROWTH FACTOR
                                                                                                                                                                                                                                                 POTENTIAL
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"The Balbiani ring 4 gene in Chironomus tentans has a diverged repetitive structure split by many intrens.";

J. Mol. Biol. 211:381-349(1990).

-i- FUNCTION: USED BY THE LARVAP TO CONSTRUCT A SUPPRAMOLECULAP STRUCTURE. THE LARVAL TO CONSTRUCT A SUPPRAMOLECULAP A GLE AS A TRANSFORT PROTEIN THAT BINDS TO OTHER PROTEINS THESE TOWN AND IN THE CHAND LUMBEN IN OFFER TO PERVENT THESE TOWN AND THE CHAND LUMBEN IN OFFER TO PERVENT THESE
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ol-on1-193 (Rol. 27, Created)
ol-on1-193 (Rel. 27, Last sequence update)
ol-on1-1994 (Rel. 30, Last amoutation update)
FALBIANI FIRST FROTEIN 3 FRECUESOR.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Chironomis tentans (Midge).
Eukaryota; Metazoa: Arthropoda: Fracheata; Hexapoda; Insecta;
Etterydota: Neoptera: Endopterydota: Diptera: Nematocera:
                                                                                                                                                                                                                                                                                                                                                                                                                                            PIR: $08167; S08167.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              entities requires a license agreement (See http://www.ish-sib.ch/announce/or send an email to license ish-sib.ch).
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MEDLINE 90172404; PubMed 1689777;
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                   SEQUENCE 1700 AA:
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                                                                                                                                                                                                                                                          PRINTS: PR00876: MINEMATODE
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"HE, 19", and 15N backbone assignment and secondary structure of the receptor binding domain of vascular endothelial growth factor.";
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                                                                                                 SUBJUNCT: HOMODIMER; DISULFIDE LINKED
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189 AND VEGE 215).
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AFGE_PIG
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20-AUG-2001 (Rel. 40, Last annotation update)
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Mammalia; Eutheria: Cetartiodactyla: Suina; Suidae; Sus.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Biochim. Biophys. Acta 1260:235-228(1995).
-i- FUMITION. JEOMTH ENCYOP ACTIVE IN ANATOGENESIS. AND ENDOTHER CELL SEGMTH. INDUCES EXPOTHELIAL PROTTEPRATION AND VASCULAR PERMAPARILITY (BY SIMILARITY).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDLINE-95143284; PubMed-7841203;
Sharma H.S., Tand Z.H., Gho B.C.H., Verdonw P.D.;
"Nucleotide sequence and expression of the porcine vascular
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NCBI_TaxID=9823;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sus scrota (Pig)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SIMILARITY). BELONGS TO THE PDGF/VEGF FAMILY OF GROWTH FACTORS
                                                                                                                                                                                                                                                                                                                                                                                                               modified and this statement is not removed.
                                                                                                                                                                                                                                                                                                                                                                                                                                       the European Bioinformatics Institute.
                                                                                                                                                                                                                                                         PROSITE: PS00249: PDGF_1: 1. PROSITE: PS50278: PDGF_2: 1.
                                                                                                                                                                                                                                                                                                                  Plam; PF00341; PDGF;
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                                                                                                                       SEQUENCE
                          113 ELLKSIDNEWRKTUCMPREYCIDYGKEFGAAINTEFKPPCYSYYROOGCONSEGLOCMNT 172
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                                                                     Local Similarity
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38 EVVKEMD-VYORSYCRPIETLVDIFQEYPDEIEYIFKPSCVPLMRCGGCCNDEGLECVPT 96
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VASCULAR ENDOTHELIAL GROWTH FACTOR

Mitogen; Growth factor; Glycoprotein; Signal.

PROSITE; PS00249; PDGF_1: 1. PROSITE; PS50278; PDGF_2: 1. SMART; SM00141; PDGF; Probom; PD001629;

PDGF; 1.

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01-AUG-1990 (Rel. 15, Last sequence update)
20-AUG-2001 (Rel. 40, Last annotation update)
VASCULAR ENDOTHELIAL GROWTH FACTOR PRECURSOR (VEGF) (VASCULAR
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Mammalia; Eutheria; Redentia; Sciurognathi; Muridae; Mirihae; Kattus
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             that is homologous to platelet derived growth factor.";
Ploc. Natl. Acad. Sci. U.S.A. 87:2628-2633(1990).
-!- FUNCTION: GROWTH FACTOR ACTIVE IN ANGLOGENESIS, AND ENDOTHELIAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A., AND SEQUENCE OF 27-190. MEDITHE 90207244: Pubmed-2320579:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               "Amino acid and cDNA sequences of a vascular endothelial cell mitogen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Palisi T.M., Hope D.A., Thomas K.A.;
                                                                                                                                                                                                                                                                                                               use by non-profit institutions as long as its content is in no modified and this statement is not removed. Usage by and tor commer entities recoired.
                                                                                                                                                                                                                                                                                                                                                     This SWISS-PROT entry is copyright. It is produced through a callaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its
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HSST; F15692; 2VGH
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01 APR 1990 (Rel. 14, Last sequence update)
20 ADG 2001 (Rel. 40, Last annotation update)
VASCULAR ENDOTHELIAL GROWTH FACTOR PRECURSOR (VEGF) (VASCULAR
This swiss Prof ontry is onpyright. It is produced through a collaboration
                                                                                                                                                                                                 "Pituitary tollicular cells secrete a novel heparin binding growth tactor specific for Mascular cudothelial cells.";
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Tischer E., Gospodarowicz D., Mitchell R., Silva M., Schilling J.,
Lau K., Crisp I., Fiddes J.C., Abraham J.A.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDIINE 90069508; FubMed 2479986;
Leung D.W., Cachianes C., Kuang W. J., Goeddel D.V., Fertara N.;
"Vascular endothelial growth factor is a secreted angiogenic
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                                                                                                                                                                                                                                                                                                               Biochem. Biophys. Res. Commun. 165:1198:1206(1989)
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derived growth factor gene family.":
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                                                                                                                                                                                                                                                                             SHOUTHIE OF 27 81.
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                          SIMILARITY: HELONGS TO THE PIKEF/VEGE FAMILY OF GROWTH FACTORS.
                                                                                                                                                                 chem. Biophys. Res. Commun. 161:851-858(1989).
FUNCTION: GROWTH PACTOR ACTIVE IN ANDIOGENESIS, AND ENDOTHELIAN
                                                                                                                               ALITHARGMAGA
                                                                                                                                                CELL GROWTH, INDUCES ENDOTHELIAL PROLIFERATION AND VASCULAR
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                                                                                                                                             01-AUG-1992 (Rel. 2), Created)
01-AUG-1992 (Rel. 2), Created)
01-AUG-1992 (Rel. 2), Last sequence update)
20-AUG-1991 (Rel. 40, Last annotation update)
VASCULAK ENDOTHELIAL GROWTH FACTOR (VEGF) (VASCULAR PERMEABILLITY
                                                                                                                                                                                                        VEGF_CAVPO
P26617;
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or send an email to licensegisb-sib.ch).
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   Submitted (XXX-1992) to the EMBL/GenBank/DDBJ databases
                                                          NCBI_TaxID 10141;
                                                                                     Eukaryota,
                                                                                                     Cavia porcellus (Gninea pig).
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               Berse B.
                                SEQUENCE FROM N.A.
                                                                         Mammalia; Eutheria;
                                                                                                                               FACTOR) (VPF).
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                                                                                                                                                                                                                                                                                                                                                                                                                                          174 STOYLEKTLIETTVEL - - SQUEKEVTISEANHTSOROMSKILDVYRQVHSITRESLEA 227
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                                                                                     Metazoa;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          190 AA;
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86
76
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                                                                                                                                                                                                                        STANDARD;
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93
127
129
76
85
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23.9%; Pred. No. 4.6e-09;
                                                                        Chordata; Craniata; Vertebrata; Enteleostomi;
Rodentia; Hystricognathi; Caviidae; Cavia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          22310 MW;
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PROSITE: PS50278: PDGF_2; 1.

PROSITE: PS50278: PDGF_2; 1.

PROSITE: PS50278: PDGF_2; 1.

PROSITE: PS50278: PDGF_2; 1.

BY SIMILAR DISULEID 50 103 BY SIMILAR DISULEID 50 103 INTERCHAIN DISULEID 59 59 INTERCHAIN CARBOHUD 74 74 N-LINKED (CARBOHUD 74 74 N-LINKED (CARBOHUD 74 PDGF)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE
                                                                                                                                                                             MOUSE
                                                                               01-APR 1993 (Rel. 25, Created)
v1-ocm-1996 (Rel. 34, Last sequence update)
20-AUG-2001 (Rel. 40, Last annotation update)
VASCULAR ENDOTHELIAL GROWTH FACTOR PRECURSOR (VPGF) (VASCULAR
                                                  VEGF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   149 KPPCVSVYRCGGCCNSEGLOCMNTSTGYLSKTLFEITVPL----SQGPKPVTISFANHT 203
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                            VEGE_MOUSE
                                    Mus musculus (Mouse)
                                                                PERMEABILITY FACTOR) (VPF).
                                                                                                                                              QU0731;
                                                                                                                                                                                                                                                                                                                                      264 VELIGSTNIGEHDVOGDIKKELDEST OG IVOKOM RESSMORHKEL --- DEDSMOOVOKNKLE 320
                                                                                                                                                                                                                                                                                                                                                                         100 KCECRPKKUKARC -----
                                                                                                                                                                                                                                                                                                                                                                                                     204 SCROMSKIDVYKOVHSTIRRSDPATLEQCQAANKICPTNYVWNNYMCECLAQQDEIEYSN 263
                                                                                                                                                                                                                                            142 SERCKARQUELNERTÉRO 159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  85 GWQQPTLNTRTGDSVKFAAAHYNTEILKSIDNEWRKTQCMPREVCIDVGKEFGAATNTFF 148
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                                                                                                                                                                                                                                                                           321 PNSCGANR-EFDENTCQC 337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SUBURIT: HOMODIMER; DISULFIDE-LINKED SUBCELLULAR LOCATION: SECRETED BUT R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    6 GFQKPR-----EEVKEM------DVYKPSYCRPTEMLVDIFGEYPDEIEYIF
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   164 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                    Metazou;
                                                                                                                                                                 STANDARD;
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12 5 4 9 1
                 chordata: Cramiata: Vertebrata: Euteleostomi:
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INTERCHAIN (BY SIMILARITY).
N-LINKED (GLONAC...) (POT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 164;
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Breier G., Albrecht U., Sterrer S., Risau W.; "Expression of vascular endothelial growth factor during embryonic anglogenesis and endothelial cell differentiation.";
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDLINE=92274860; PubMed=1592003;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   "The mouse gene for vascular endothelial growth factor. Genomic structure, definition of the transcriptional unit, and characterization of transcriptional and post transcriptional
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDLINE=92355593; PubMed-1644816;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Shima D.T., Kuroki M., Deutsch U., Ng Y., Adamis A.P., D'Amore P.A.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    regulatory sequences.";
J. Biol. Chem. 271:3877-3883(1996).
-i- FUNCTION: GROWTH FACTOR ACTIVE IN ANGIOGENESIS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDLINE=96216498; PubMed-8632007;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LONGEST FORM (MEGETA, SHOWN HERE) CONTAINS A BASIC INSERT LINKED LONGEST FORM (MEGETA). SHOWN HERE CONTAINS A BASIC INSERT LINKED TO CELL ASSOCIATION/HEPARIN-BINDING.

TO CELL ASSOCIATION/HEPARIN-BINDING.

TISSUE SPECIFICITY: IN DEVELOPING EMBRYOS, EXPRESSED MAINLY IN TISSUE SPECIFICITY: IN DEVELOPING NEUROOEPITHELIUM, PLACENIA AND THE CHAPGE FOUND IN BROWCHIAL EPITHELIUM, ADRENAL KICNEY GLOWERULI, ALSO FOUND IN BROWCHIAL EPITHELIUM, ADRENAL GLAND AND IN SEMINIFEROUS TUBBLES OF TESTIS. HIGH EXPRESSION OF GLAND AND IN SEMINIFEROUS TUBBLES OF TESTIS. HIGH EXPRESSION OF VEGF CONTINUES IN KIDNEY GLOWERULI AND CHOROLD PLEXUS IN ADDITIS. VEGF CONTINUES IN KIDNEY GLOWERULI AND CHOROLD PLEXUS IN ADDITS. SIMILARITY: BELONGS TO THE PDGF/VEGF FAMILY OF GROWTH FACTORS.
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                                                                                                                                                                                                                                                                                                                                                                                                                                               the European Bioinformatics Institute. There are no rest use by non-profit institutions as long as its content modified and this statement is not removed. Usage by an entities
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EMBL, $38083; AAB22253.1;
EMBL, $38140, AAB22254.1;
EMBL, $48140, AAB22254.1;
EMBL, M95200; AAA4547.1;
                                                                                                                                                                                                                                                                                                                                                                                                                     or send an email to licensedish-sib.ch).
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                                                                                                                                                                                        ProDom; PD001629; PDGF; 1. SMART; SM00141; PDGF; 1.
                                                                                                                                                                                                                                                                                                                     EMBL; U41383;
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                                                                                                                                                                                                                                                            MGD; MGI:103178; Vegf
                                                                                                                                                                                                                                                                                                  212
                                                                                        DISULFID
                                                                                                                                                                                                                            Pfam; PF00341; PDGF;
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 CARBOHYD
                    DISULFID
                                   DISULFID
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                                                                                                       CHAIN
                                                                                                                            SIGNA!
                                                                                                                                         Mitogen; Growth factor;
                                                                                                                                                                                                                                               InterPro;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   VEGF-3 REMAINS CELL-SURFACE ASSOCIATED UNLESS KELLASED BY
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      HEPARIN.
                                                                                                                                                                                                                                                                                                A43351; A43351.
                                                                                                                                                                                                                                                                                 P15692;
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                    27
51
82
85
85
                                                                                                                                                                                                                                                                                 2VGH.
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                                                                                                                                                                                                                                                                                                                 NOT_ANNOTATED_CDS
                                                                                                                                           Glycoprotein; Alternative splicing; Signal.
                        INTERCHAIN (BY SIMILARITY).
INTERCHAIN (BY SIMILARITY).
                                                              BY SIMILARITY
                                                                             BY SIMILARITY
                                                                                          BY SIMILARITY.
                                                                                                               VASCULAR ENDOTHELIAL GROWTH FACTOR
                                                                                                                                BY SIMILARITY
         N-LINKED (GLCNAC. . .) (PROBABLE).
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Usage by and for commercial
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SMART: SM00181; EGF; 10.
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InterPro: IPR001881; EGF_Ca
105 KCVCKNONEGELSEKNVSSENRCKNNOKCSELOK LOVKCTCSGGYTGERGEVHACKENPS
                                     141 GAA
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                                                                                                             81 YMCQUAKGGWQQFILNIKIGDSYNFAAAHYNIETIKSTDNEWRKTQCMFREYCIDYGKEF 140
                                                                         YEC-FOEGGYY--
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36; Mismatches 125; Indels 190; Gaps
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-1- FUNCTION: GROWTH FACTOR FOR ENDOTHELIAL CELLS. BINDS HEPAKIN.
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p49766;
p1976 (Rel. 34, Greated)
01-0GT-1996 (Rel. 34, Last sequence update)
20-AUG-2001 (Rel. 40, Last annotation update)
20-AUG-2001 (Rel. 40, Last annotation update)
VASCULAR ENDOTHELIAL GROWTH FACTOR B PRECURSOR (VEGF-B) (VASCULAR
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                                     the European Bioinformatics institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial
                                                                                                    This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics, and the EMRL outstation -
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                entitles requires a license agreement (See http://www.isb-sib.ch/announce/
                                                                                                                                                                                                                                                                                                                                                                                                                                             MEDI.INE=96183052; PubMed 8607868;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           endothelial cells.";
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or send an email to licenselish sib.ch).
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                                                                                                                                                                            SIMILARITY: BELONDS TO THE PDDE/VEGE FAMILY OF TROWTH FACTORS
                                                                                                                                                                                                                    SUBCELLULAR LOCATION: SECRETED BUT REMAINS ASSOCIATED TO CELLS OR
TO THE EXTRACELLULAR MATERY UNLESS PELEASED BY HEPARIN. FIGNEY
TISSUE SEPCIFICITY: ARUNDANTLY EXPRESSED IN HEART, ERAIN, FIGNEY
                                                                                                                                                                                                    AND SKELETAL MUSCLE.
                                                                                                                                                                                                                                                                                          WITH VEGE
                                                                                                                                                                                                                                                                                                          SUBUNIT: HOMODIMER; DISULFIDE-LINKED. CAN ALSO FORM HETERODIMER
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Best Local
                                                      "Cloning and characterization of a novel human gene related to vascular endothelial growth factor.";

Genomic Res, 6:124-131 (1996).

-i- FUNCTION: CROWTH FACTOR FOR ENDOTHELIAL CELLS, BINDS HEPARIN.

-i- SUBJUNIT: HOMODIMER; DISULFIDE-LINKED, CAN ALSO FORM HETERODIMER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           01-00T-1996 (Rel. 44, Created)
01-00T-1996 (Rel. 44, Last sequence update)
29-AUS-2001 (Rel. 40, Last annotation update)
VASCULAR ENDOTHELIAL GROWTH FACTOR B PRECURSOR (VEGF-P) (VEGF RELATED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                HUMAN
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                                                                                                                                                                                                                                                MPDLINE 97077124; PabMed-8919691;
Grimmond S., Ladercrantz J., Drinkwater C., Silins G., Townson S.,
Polliock P., Gotley D., Carson E., Bakar S., Nordenskjoeld M., Ward L.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                     "Vascular endothelial growth factor B, a novel growth factor endothelial cells.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Enkaryola: Metazoa: Chordata: Craniata; Vertebrata; Enteleostomi:
Mammalia: Entheria: Primates: Catarrhini; Hominidae; Homo.
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EMBL; 043837; AAC52553.1;
HSSP; P15692; 2VGH.
                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                      Proc. Natl. Acad. Sci. U.S.A. 93:2576-2581(1996)
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Saksola o Lorpana A., Pottersson E.E., Alifalo K., P
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                                                                                                                                                                                                                        Hayward N., Weber G.;
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SUBCELLULAR LOCATION: SECRETED BUT REMAINS ASSOCIATED TO CELLS OR
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Reymolds Libi. Moor R.M.;

"Characterisation and expression of yascolar endethelial growth
"Characterisation and expression of yascolar endethelial growth
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01 of 1996 (Rel. 4) List sequence update)
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VASCULAR ENDOTHELIAL GROWTH FACTOR PRECURSOR (VECE) (VASCULAR
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or send an email to license-risb-sib-sh)
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                                                                                                      MEDIENE 9711/958; PubMed 8958842;
Redumer D.A., Dai Y., Li J., Charn
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Mammalia; Entheria; Cetartiodactyla; Ruminantia; Pecora; Bovoidea;
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                                                                                                                                                                         TISSUE Kidney:
                                                                                                                                                                                                             SECUENCE FROM N.A.
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TISSUE SPECIFICITY: EXTRESSED IN ALL TISSUES EXCEPT LIVER.
TISSUE SPECIFICATION IN HEADET, SKELETIAL PRISCLE AND PANCHEAS.
SIMILARITY: RELONGS TO THE PLOFT/VER FAMILY OF GROWTH FACTORS.
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27.5%; Pred. No. 1.8e 07;
                                                                                                      Li J., Charmock Jones D.S., Smith S.K.
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                                                                                                                                                                                                              VEGE_CHICK STANDARD: PRF: 216 AA. P52582: 091420: 01:00T:1996 (Rel. 34, Created) 01:00T:1996 (Rel. 36, Last sequence update) 20:ARG:2001 (Rel. 40, Last annotation update) VASCOLAR ENDOTHELIAL GROWTH FACTOR PRECURSOR (VEGF) (VASCULAR ERDOTHELIAL GROWTH FACTOR PRECURSOR (VEGF) (VASCULAR PERMEABILLITY FACTOR) (VPF).
                                                                                                                                                                                                                                                                                                                                             CHICK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           J. Reprod. Fertil. 108:157-165(1996).
-!- FUNCTION: GROWTH FACTOR ACTIVE IN ANGIOGENESIS, AND ENDOTHELIAL CELL GROWTH. INDUCES ENDOTHELIAL PROLIFERATION AND VASCULAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SMART: SM00141; PDGF; 1. PROSITE; PS00249; PDGF_1; 1. PROSITE; PS50278; PDGF_2; 1.
              Submitted (EEH-1998) to the EMRL/SonBank/DDBJ databases
                                Takahashi
                                            SPECIES Chicken; TISSUE Heart;
                                                              SEQUENCE FROM N.A
                                                                                               NCBI_TaxID=9031, 93934;
                                                                                                                                 Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
                                                                                                                                                 Coturnix coturnix japonica (Japanese quail).
Eukarysta: Metazoa: Chordata: Craniata: Vertebrata: Euteleostomi;
                                                                                                                                                                                                       VEGE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     InterPro; IPR000072; PDGF. Pfam; PF00341; PDGF; 1.
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HSSP; P15692; IVPF.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        the European Bioinformatics Institute.
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                                                                                                                                                                                   Gallus gallus (Chicken), and
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                                                                                                                                                                                                                                                                                                                                                                                                                                            173 SIGYLSKILFEITVPL-----SQGPKPVTISFANHISCKCMSKLDVYRQ 216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             113 ETLKSTONEWRKTOCMPREVCIDVGKEFGAATNTFFKPPCVSVYEGGGGCCNSEGLJCMNT 172
                                                                                                                                                                                                                                                                                                                                                                                                              97 EEE-----ENTEMOLIMRIKPHOSQHIGEMSFLOHNKCECRPKKDKARO 138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            38 EVMKEMD-VYQRSFCRPIETLVOIFQEYPDEIEFIFKPSCVPLMRCGGCCNDESLECVPT 96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SIMILARITY: BELONGS TO THE FUGE/VEGE FAMILY OF GROWTH FACTORS
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SUBULT: HOMODIMER; DISULFIDE BUT REMAINS ASSOCIATED TO CELLS OR
SUBCLIDIAN LOCATION: SECRETED BUT REMAINS ASSOCIATED TO CELLS OR
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33.4%; Pred. No. 4.5e-07
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VASCULAR ENDOTHELIAL GROWTH FACTOR.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Flamme I.. von Reutern M., Drexler H.C., Syed-Ali S., Risau W.; "Neere grees is a class after analythelial growth the tar in the avian embryo induces hyperrasemilarization and increased vascular permeability without alterations of embryonic pattern formation.":
                                                                                                                                                                                                                                                            VARSPLIC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Flamme 1., Broier G., Risan W.; "Vascular endothelial growth factor (VEGF) and VEGF receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEUTIENCE OF 60-187 FROM N.A
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MEDLINE 96005007; PubMed-7556923;
                                                                                                                                                                                                  VARSPLIC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         or send an email to license isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            entities requires a license agreement (See http://www.ish-sib-ch/announce/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      differentiation in the quail embryo.":
Dev. Biol. 169:699-71Z(1995).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDI INE 95301109; PubMed 7781909;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Interpro;
                                     113 EILKSTONEWRKTOMMPREVOIDVOKFEGAAINTEEKPPOVSVYROGGOONSEGLOOMNT 172
                                                                                                    Local Similarity
35 EVIKELE-AAEKSEGRITELLADIEÖRADEAAALTEBESCABIWEGVGGOBEGTEGABA 62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TISSUE SPECIFICITY: ABUNGANILY AND EQUALLY EXPRESSED IN HEART AND LIVER. IN KIDNEY GLOMEPHIL, BRAIN AND YOLK SAC, VECE-156 FORM IS 5-TO TO-TIMES MORE ARRIVANT THAN THE VEGE-190 FORM. DEVELORMENTAL STAGE, THE VEGE-166 FORM IS EXPRESSED EARLY AT DAY AND IS UPPRADED FOR ING CARIRCLATION. EXPRESSION OF THE VEGE-199 AND IS UPPRADED FOR ING CARIRCLATION.
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ALLERAND PRODUCTS: THREE ISOFORMS (VEGF-190, VEGF-146 AND VEGF-
166) ARE PRODUCED AS A PERBUT OF ALTERNATIVE SELECTIVE OF THE SAME
GENE. THE LOWIER FORM CONTAINS A BASIC INSERT WHICH ACTS AS A CFIL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FUNCTION: GROWTH FACTOR ACTIVE IN ANGIOGENESIS, AND ENDOTHELIAL
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Pred. No. 5.7e-07;
"Mismatches 82;
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MISSING (IN ISSPERM VEGETIGE).
ROBERGINGSY FORDAT CHOCA
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BY SIMILARITY.
VASCULAW ENFOTHERIAL GROWTH FACTOR
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BY SIMILARITY.
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INTERCHAIN (BY SIMILARITY).

N-LINKED (GLCNAC. . .) (POTENTIAL).

K -> N (IN ISOFORM VEGF-166).

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NOTC_DROME
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"Many cell types specified by Notch function.";
"Many cell types specified by Notch function.";
Curr. Hol. 1:120 122(1991).
! FUNCTION. NOTCH ESSIEIN IS ESSENTIAL FOR PROPER DIFFERENTIATION
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MEDILINE 8725784: FilmAci 3047327;

MEDILINE 8725784: FilmAci 3047327;

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MEDILINE 8725784: FilmAci 3047327;

MEDILINE 8725784: FROM N.A.

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MEDLINE-85099329; PubMed-2981631;
MEDLINE-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Prosophila melaneqaster (Fruit fly).
Eukaryota: Metazea: Arthropeda: Trachedta: Hexapoda: Insecta:
Pterygota: Neoptera: Endopteryqota: Diptera: Brachycera: Muscumorpha:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-NOV-1986 (Ref. 03, Created)
01-FFB-1996 (Ref. 33, Last sequence update)
20-ANG-2001 (Ref. 40, Last annotation update)
NEOROGENIC LOCUS NOTCH PROTEIN PRECURSOR.
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NCBl_TaxID 7227;
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"Nucleotide sequence from the neurogenic locus notch implies
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         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NEUROGENIC GENES.
SIMILARITY: HIGH, WITH OTHER NOTCH-TYPE PROTEINS SIMILARITY: CONTAINS 36 EGF-LIKE DOMAINS.
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Differentiation: Neuropopesis; Repeat; ANK repeat; EGE_like domain;
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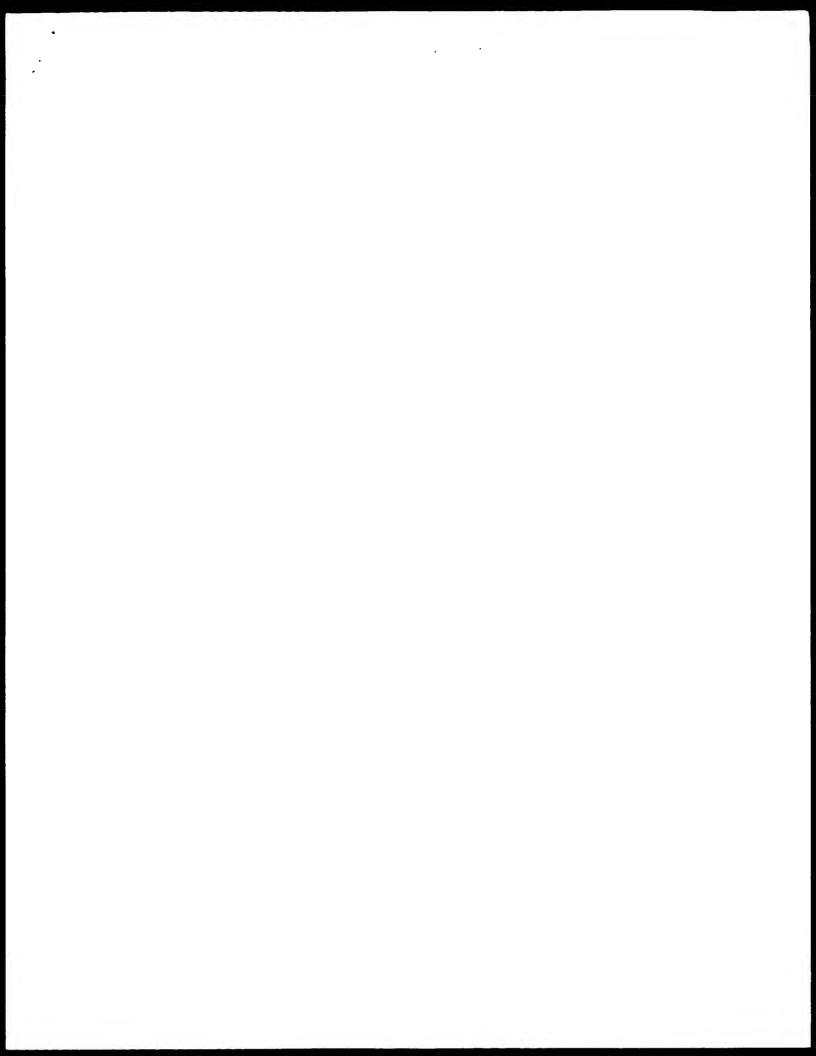
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Sparch completed: February 20, 2002, 16:27:32 Job time: 170 sec



<pre>Database : PIR_68:*</pre>	Post-processing: Minimum Match 0% Maximum Match 1888 Listing first 45 summaries	Minimum DB seq length: 0 Maximum DB seq length: 2000000000	Total number of hits satisfying chosen parameters:	Searched: 219241 segs, 76174552 residues	Scoring table: BLOSDM62 Gapop Lo.O., Gapext 0.5	TITLE: US-19-544-476A-II POTTECT SCORE: 243 Sequence: I MHILIFELSLAGSILAAALIPSPSEEVCRCVESYWKRPHIN 415	Run on: February 20, 2002, 16,20152	oM protein · protein search, using sw model	Genetore version 4.5 Copyriath (**) 1893 - 2000 Compagnet Ltd.
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SUMMARIES

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J. Mol. Biol. 211, 31 349, 1990
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85.4%; Pred. No. 1.6e-143;
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ArTitle: Vascular permeability factor, an embathelial cell mitogen related to PDGF.
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                                                                                                                          A; Residues: 1-165, 183-232 < KECF
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vascular endothelial growth factor 196 precursor—human N;Alternate names: vascular permeability factor N;Contains: vascular endothelial growth factor 121 (VEGE 121); VEGE 165; VEGE 189; VE

Mol. Endocrinol. 5, 1806–1814, 1991 A;::rtle: the Mascular endothetral growth factor family: identification of a fourth mo A;Reference number: A4155); MOID:92168017 C.L.10. 18 A21 1992 #Septemon_Perision 18 Apr 1990 #Fext change 05 Nov 1999 C.Accession: A41551; C41551; B41551; A40454; B40454; C40454; A40079; A40080; JQ1463; K.A.; Ferrara, N.; Winer, J.; Cachianes, G.; Li, B.; Leung, D.W.

A; Cross - references: GB: S85192; NID: g246155; PID: g246156

A; Status: nucleic acid sequence not shown

A;Cross-reterences: GB:M63971; GB:M63972; GB:M63973; GB:M63974; GB:M63975; GB:M63976;

A;Cross-reterences: GB:M63971; GB:M63972; GB:M63973; GB:M63974; GB:M63975; GB:M63977;

A; Molecule type: DNA A; Rosidaes: 1 141, 227 232 7113. A;Cross references: GB:M63971; GB:M63972; GB:M63973; GB:M63974; GB:M63978; GB:M63978

A; Reterence number: A40079; MUID: 90069609

A; Status: not compared with conceptual translation

A;Cross references: GB:M27281; MIB:q:49:90; BIBN:AAA:6897.1; EHD:q:40 R;Leung, D.W.; Cachianes, G.; Khang, W.J.; Gowddel, D.V.; Ferrara, N. Seience 246, 1306-1309, 1989 MID: \$340390; PIDM: AAA 35807.1; PID: 4340301

A:Title: Vascular endothelial growth factor is a secreted angiogenic mitogen

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J. Biol. Chem. 264, 20017-20024, 1989
A:Iltle: Human vascular permeability factor. Isolation from U937 cells.
A:Reteronce number: A34492; MUID:90062112
A:Recession: A34492
A:Recession: A34492
A:Redecente type: protein
A:Redecente type: protein
A:Redecente type: protein
C:Comment: The most common of several alternatively spliced forms is VEGF 165.
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Riochem, Biophys. Res. Commun. 183, 1167-1174, 1992

A; Fitther AIDS-associated Kapowi's surcoma colls in culture express vascular endothelial A; Reference number: JQ1463; M01D:92241879

A; Reference number: JQ1463; M01D:92241879

A; Reference number: JQ1463; M01D:92241879

A; Residues: 1-140, N', 184-232 - WEI's

A; Residues: 1-140, N', 184-231; Nib:q37658; PiDN:CAA44147.1; PiD:q37659

A; Epsilmental searce, AIOS: Kapowi's safronta cell

A; Recession: JQ1464

A; Molecule type: mRNA

A; Residues: 1-140, N', 227-232 - WEI's

A; Epsilmental searce, AIOS: Kapowi's safronta cell

R:Connolly, D.I.; Plander, J.V.; Henvelmon, D.; Melson, P.; Mensell, R.; Siegel, M.; Hay

J. Biol. Chem. 264, 20017-20024, 1989
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Observands: alternative splitting antiqueness; directling band, extracellular profiles.

El-2-42 Freduct... as the read the link growth fact of 27 protests status gradiated v22 prolifes. as the read in contract of 1811-185 like-232 for other consent restates for different properties. The contract of the productor status products and the link and the
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A:Accession: A40080
A:Status: not compared with conceptual translation
A:Molecule type: mRNA
A:Residues: 1-140; NY, 184-232 <LEU>
                                                                                                                                                                                                                                                                                                                                                                                   C:Species: Sus scrota domestica (domestic pig)
C:Date: [4-Jul-1995 #sequence_revision 21-Jul-1995 #text_change 05-Nov-1999
C:Accession: S52130
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C:Function:
A:Reference number: $52130; MUID:95143284
A:Accession: $52130
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Biochim, Biophys. Acts 1969, 236-238, 1995
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                                                                                                                                               A:Title: Nucleotide sequence and expression of the poreine vascular endothelial growth
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local Similarity 26,8%; Pred. No. 5,6e-10;
hes 63; Conservative 30; Mismatch:
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C:Accession: B44881; A43351; A61029
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A;Residues: 1-190 <CON+
A;Cross references: CB:M32167, NID-g204287, PIDN.AAA41211.1, FID-g204288
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RECOND. G.J. Buyne, M.L.; Soderman, D.D.; Kwok, P.W.; Sullivan, K.A.; Palisi, T.M.; Froe. Natt. Acad. Sci. U.S.A. 87, 2028-2022, 1990
A.Title. Aminos acid and eDNA segrences of a mascular endethelial cell mitogen that Apperence member: A35987

A:Accession: A35987
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C.Species: Rattus norvegicus (Norway rat)
C.Date. 16 Nov 1998 #sequence_revision 16-Nov-1990 #text_chango 05-Nov-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A; Molecule type: mRNA
A; Residues: 1-190 < SHA>
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          A;Cross-references: GB:X81380; NID:q587559; PIDN:CAA57143.1; PID:q587560
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      113 EILKSTUNEWFKIGGMFREVOITVGKEFGAMINIFFKFFGVSVYROGGGGMSEGLGCMNI 172
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 85 TRKGGWQQPTLNTRTGDSVKFAAAHYNTETLKSTDNFWFKTQCMPREVCTDVGKEFGAAL 144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               38 EVVKEMD-VYORSYCRP1ETLVD1FQEYPDETEY1FKPSCVPLMRCGGCCNDEGLECVPT 96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TSCRCMSKLDVYKQVHSIIRRSLPATLPQCQAANKTCPTNYVWNNYMCK-(LAQQDFIFY 261
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NTEEKPPOVSVYROGIOONSEGLOOMNISTOYLSKILFELIVELSO--GEKEVILSFANH 202
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 QCVCKGGLRPSSCGPHKEL - - DEDSCQCVCKNKLFPNSCGANF-EFDENTCQC 337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EE-----FNITMQIMKIKPHQAQHTGFMSFLQHNKCFCRPKKDRAKQ-------138
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       -DPOTCKCSCKN--TIJSKCKARQLELNERTCRC 185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                30; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 2; Length 190;
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A:Cross references: GR:M31836; NID:q163808; PIDN:AAA30804.1; PID:q163809 R:Ferrara, N.; Henzel, W.J. Biochem. Biophys. Res. Commun. 161, 851-858, 1989
                                                                                                                                                                                                                                                                                   A:Modernie type: mRNA
A:Bostobes: I 190 (LEN)
A:Bostobes: Peterenes: GR.M32976; NID:q163006; PIDN:AAA30502.1; PID:q163007
A:Cross references: GR.M32976; NID:q163006; PIDN:AAA30502.1; PID:q163007
A:Ficeles: E.; Gospedirowicz, D.; Mitchell, R.; Silva, M.; Schilling, J.; Lau, K.; Crisp
Riochem, Riophys, Pest. Commun. 165, 1198–1206, 1989
A:Ficeles: Vascular endothellal growth factor: a new member of the platelet-derived growth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   C:Species: Bos primigenius taurus (cattle)
C:Date: 30 Jun 1992 #seepeere regision 30:Jun-1992 #text_change 05:Nov-1999
C:Accession: B400B0; B3787; A33255
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A:Retorence number: A61029; MUID:91197544
A:Retorence number: A61029; MUID:91197544
A:Retorence type: protein
A:Residues: 27:48-4808.
C:Keywords: allernative splicing; angiogenesis; dimer: disultide bond; glycoprotein; mit
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A:Fitte: Vascular endothefial growth factor is a secreted angiogenic mitogen.
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Astross references CHEMY$200; NHD:a2023$3; PHDN:AAA40$47.1, PHD:a2023$1
Asnote: sequence extracted from NCH backbone (NCHEN:110665, NCHEP:11067
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A: Fitle: Vascular embothelial growth factor, Regulation by cell differentiation and act
A:Reference number: A43351; MUH::92355593
A:Accession: A43351
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R:Claffey, K.P.; Wilkison, W.O.; Spiegelman, B.M.
J. Biol. Chem. 267, 16317-16322, 1992
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A:Acression: B44881
A:Molecule Type: mRNA
A:Title: Pituitary follicular cells secrete a novel heparin-binding growth factor speci
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                                                                                                                                                       A:Residues: 27 190 - FIS-
                                                                                                                                                                                       A: Molecule 1 yper mBNA
                                                                                                                                                                                                                                       A:Accession: B+3787
                                                                                                                                                                                                                                                                       A; beterence number: A33787; MUID:90121225
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               163 SCKN HISPOKAPSTEINBEGGE, 186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AND MIKRRISHSSCHIPHK EILDRISHOF 313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          231 QCQAANKTOFTNYVWNNYMCK (TLAQQDFTFYSNVEDDSTNGF1fDVCGPNKELDEDFCQC 289
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      17 CSTOYLSKTLEETTVPLSQ GERRATTISEANHTSCHOMSKLDVYRQVHSIIRKSLPATLP 230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      38 EVIKEMD VYGRSYCKFITETLVDIFGEYPDETEYTEKPSCVPLMRCAGCCNDEALECVPT 96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SESNITING IMPIKEHOSOHIOS --- EMSELDHSKOEGREKKE-
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5
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A;Reference number: A34255; MUD:89286596
A;Accession: A34255
A;Molecule type: protein
A:Residues: 27-31 - FER>
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F)27 196/Product, gascalar endothelial growth factor #status predicted MAZ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         113 ETLKSTDNEWRKTOCMPREVCTDVGKEFGAATNTFFKPPCVSVYRCGGCCNSECLOCMN1 172
                                                           288 QCVCKGGLEPSSCGPHKED - - DKDSGQCVCKNKLFPNSCGANR - EFDENTCQC 337
                                                                                                                                                                                                     228 TEPOCQAANKTOPTNYVWNNYMOROLAOQDFTFYSNVEDDSTNOFHDVOGPNKEEDEBTO 287
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            toral Similarity
tes 56; Conserv
                                                                                                                                                                                                                                                                    97 EE----FNITMQIMRIKPHQSQHIGEMSFLQHNKCECKPKKDKARQ-
                                                                                                                                                                                                                                                                                                                                                                                                                  38 EVVKEMD-VYQRSECRPIETLVDIFQEYPDEIEFIFKPSCVPLMRCGGCCNDESLECVPF 96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8.5%; Score 198.5; DB 2
Ellarity 23.9%; Pred. No. 1.1e-07;
Conservative 24; Mismarch
-RRKHLEVelphetokosokno--bskokakeletinektoko 185
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vascular endothelial growth factor-3 procursor - mouse N:Contains: vascular endothelial growth factor-2; vascular permeability factor

A: Accession: A44881 A; Reference number: A44881; MUID: 92274860 A: Fitle: Expression of vascular endothelial growth factor during embryonic angrogenes Development 114, 521-532, 1992

Albrecht, U.; Sterrer, S.; Risau, W.

A: Residues: Molecule type: mRNA 1-214 <BRE>

A; Crons: reterences: GB: 837952; NID:q249856; PIDN: AAB2252.1; PID:q249857

A:Accession: G44881 A: Note: sequence extracted from NCBI backbone (NCBIN:104677, NCBIP:104678) A: Experimental source: embryo

A:Molecule type: mRNA A:Residues: 1 110,299 214 <BR2>

A;Cross-reterences: GB:S8B100; NID:q249B60; FIIN:AANZ2254_1; FID:q249B61 A;Note: sequence extracted from NBI backbone (NCBIN:07624, NCBIP:107625) R:Clauss, M.; Gerlach, M.; Gerlach, H.; Brett, J.; Mang, F.; Familletti, F.C.; J. Exp. Med. 172, 1535-1545, 1990

A; Reterence number: A60932; MUID: 91079755 A:Title: Vascular permeability factor: a tumor derived polypeptide that induces endot

A; Accession: A60932

A: Molecule type: protein A: Residues: 27 3 3 30LA:

A:Residnes. 27 (G.CLA).
RESid Hard, T.; Kail, S.C.; Mitshi, Y.; Wadhwa, K.
Risid Hard, T.; Kail, S.C.; Mitshi, Y.; Wadhwa, K.
Biochim. Brophys. Acta 1224, 465-470, 1994
A:Fitte: Enhanced expression of multiple forms of VEGF is associated with spontaneous
A:Reference timmler; 852146; MOID:95101726

A; Accession: S52136

A;Status: preliminary A;Molecule type: protein A;Residues: 27-46 <SUG>

C)Keywords: alternative splicing: angiogenesis; disulfide bond; glycoprotein; homodim C;Comment: Homodimers could be demonstrated for recombinant VEGF-2 but not VEGF-3.

F(1) = 26/Domain: signal sequence #status predicted $\sim S(G) + F(27) = 214/Product:$ vascular endothelial growth factor of #status experimental $\sim MAT$ of the signal sequence of the signal of the

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ACCOSS COLUMN SECTION OF TAXING HID 169277 FILE RAADTRES I FIL dishadar Fol grazzara C.Superfamily: unussigned EGF-related proteins: EGF homology C.Keywords: duplication EGF-related proteins: EGF-17/20muin. Separal Sequence #status predicted (SIG) File/14/20muin. EGF homology (EGF) File/20muin. EGF homology (EGF) File/20muin. EGF homology (EGF) File/20muin. EGF homology (EGF)
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A:Reterence number: A56175; MUID:95294464
A:Reterence number: A56175
A:Reterence in A56175
A:Molecule type: mRMA
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A:Molecule type: mRNA
A:Residues: 1-188 <FUNN
A:Gross-references: GB:74-0837; NIFG:1314335; FIFN:AAVE2554.1; FifG:d141434
C:Comment: This factor is a mitogen, that is selective for endothelial cells,
ar_endothelial growth factors 167 and VEGF 186.
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Gene 88, 133-140, 1990
A:Title: Balbiani ring 3 in Chironomus tentans encodes a 185 kDa secretory protein wh
A:Reference number: .UQN542: MUID-90264600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Biochem, Biophys. Res. Commun. 229, 922-928, 1996
A:Title: Characterization of the mulfine VEGF-related factor gene
A:Reference number: 304679; MULD:96183952
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C)Species: Chironomus tentans
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F)1-21/Domain: signal sequence #status predicted <810>
F)22 188/Product. Jacobian codoth/hill growth factor related factor #status predicted
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A: Introns: 147/2
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                                                                                                                                                                                                                                                                                                          C;Genetics:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     C:Date: 10-May-1996 #sequence_revision 19-Jul-1996 #text_change 05-Nov-1999 C;Accession: JC4680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       N;Alternate names: VRF 167 protein
C;Species: Mus museulus (house mouse)
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Lucal Similarity 27.1%; Pred. No. 1.8e-06;
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R:Weinmaster, G.: Roberts, V.J.: Lemke, G. Development 116, 931-941, 1992

Accession: A49128

A; Title: Notch2: a second mammalian Notch dene

C:Species: Rattus norvegicus (Norway rat) C:Date: 21 Jun 1994 #sequence_revision 18:Nov-1994 #text_change 18:Aug 1999

cell-fate determining gene Noteh2 protein - rat

A49128

RESULT 15

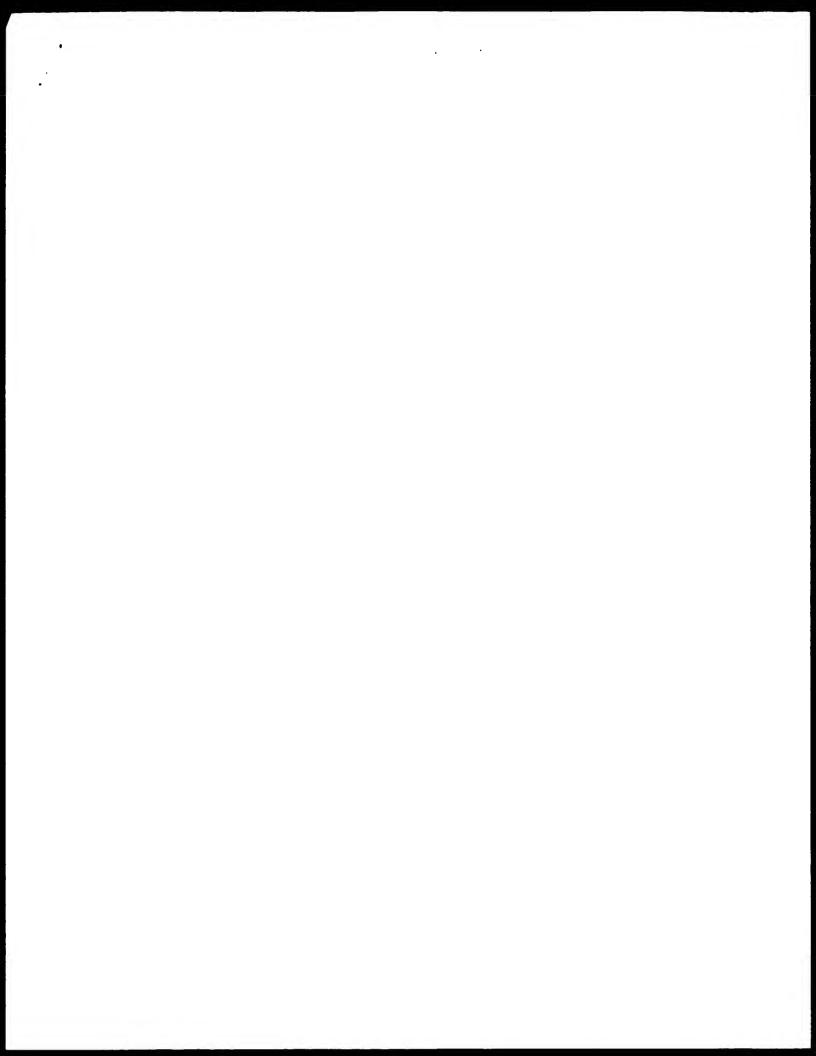
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173 STGYLSKTLEETTVPL-----SQGPKPVT1SFANHTSCRCMSKLDVYRO 216

71 EE----FN1IMQIMKIKPHQSQHIGEMSFLQHNKCECKPKKDKARU 112

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A.Status. proliminary
A.Molecule type: mkNA
A.Rosiduse: 1-120 cTIS>
A.Gross-references: GB:M33750; NID:q163810; PIDN:AAA30805.1; PID:q163811
C.Keywords: alternative splicing
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C.Species: Bos primispenins taurus (extite)
C.Date: 16 Mar 1990 #sequence_evision 16 Mar 1990 #text_change 05 Nov 1999
C.Paccession: A33787
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A;Molecule type: mRNA
A;Residues: 1-146 <RED.
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C;Species: Ovis orientalis aries, ovis ammon aries (domestic sheep)
C;Sath: [3 Jan 1996 #sequence_ferision 0] Mar 1996 #teat_damae 0
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A;Title: Vascular endothelial growth factor: a new member of the platelet derived gro
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A; Accession: $57956
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                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                      Ouery Match 7.4%: Score 172.5; DB 2: Length 120; Best Local Similarity 33.9%; Pred. No. 5.96-06;
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                                                                                                                                   113 ETLKSTONEWRKIQCMFRESCITOSGREEGAAINTEEKFFTSSSYKEGGGTGNSEGLOGMNT 172
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b-mal Similarity 34.9%; Pred. No. 6e 06;
hes 37; Conservative 17; Mismatches
12 EVVKEMD-VYOKSECKPIETLYDIEQEYPDETEFTEKESCVELMRCGGCCNDESLECVPI 70
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                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                          17; Mismatches
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                                                                                                                                                                                                                                                                       42; Indels 13; Gaps
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글 DP Ub ζ γ9 E:264-295/Domain: ERF homology (EGX) (E:799-830/Domain: ERF homology (EGX2) (E:877-995/Domain: ERF homology (EGX2) QΥ 픋 64 DP. δÃ Š Ę Š F:1876-19408/Nemmain: ankyrin repeat bomology <an1>
F:1946-1941/Nemmain: ankyrin repeat bomology <an2>
F:1944-1952/Nemmain: ankyrin repeat bomology <an3>
F:1976-2008/Dommain: ankyrin repeat bomology <an4>
F:1976-2008/Dommain: ankyrin repeat bomology <an4> A:Note: sequence extracted from NOBI backbone (NOBIP:127811)
C:Supertually: unassigned ackyric repeat proteins, ackyrin repeat homology: BOF homology A:Reterence number: A49128; MUID:93202015
A:Accession: A49128
A:Status: preliminary; not compared with conceptual translation Search completed: February 20, 2002, 16:26:18 Job time: 326 sec F:1029-1060/Domain: EGF homology <EGF> F:1067-1098/Demain: EGF homology <EGX4> F:1154-1184/Demain: EGF homology <EGF3> A: Experimental source: Schwann cell A: Molecule type: mRNA F:1191-1222/Domain: EGF homology <EGX4> A: Residues: 1-2471 WEI-Opery Match 7.3%; Score 170; 18-2; Length 2471; best Local Similarity 22.0%; Pred. No. 0.00018; Matches 115; Conservative 43; Mismatches 184; Indels 180; Gaps 1314 LNGGTCAVASNVPDGFTCKCPPGFSGARCQSSCGQVKCRKGEQCVHTASGPHCFCP---- 1369 1254 PGFAJERCEGOINECLSNPCSSEGSILJCIJIKNNYJCVCKSAFIJKHOJITELDVCPOKPC 1313 1138 PLGYT-GSY---CHEQLINECASNPCHHAICSTETGGYFGECVPGYGGVNCEYEVDECQN 1193 1078 CAQEKARPROTOPPSWIDSAYCDVLNVSCKAAALQKGVPVEHLCQHSGICINAGNTHHCQC 1137 1018 TREFOLEDINESSENDOLINGATOVERALATIVE PLANTAKNOSTIVILOSES POKIKGT 1077 240 PINYVWNNYMORALAQQOFIFYSNVEDDST----NGFHDVC-----GPNKELDEDTCQ- 288 373 HHQTC--SCYRRPCANRLKH---CDPGLSFSEEVCRCVPSYW 409 144 KPP-CV-SVYRCCC--CONS----PCI-----COMNTSTCYLSECTERITYPISCORPV 195 563 ICSDYVNSYICICPAGEHGVHCENNI-----DECTESSCENGGTCVDGINSESCICPVGE 1017 904 PSGMDGEFDINDGLANPONGGSGVDKVNTESGLGLEGEVGDKOGIDMNEGLSBEGKNGG 962 90 WQQPTLNTRTCD-SVKFAAAHYNTETLKSIDNEWRKTQCMPKEVCIDVGKEFGAAINTEF 148 51 FECKILEELLESV------SSVDEL--MSVLYPDYWKMYKCQ------LRKGG 89 QPCQNOSTCIDIANHEKCSCPPGIRGLLCEENIDDCAGAPHCINGGQCVDRIGGYSCECL 1253 NHKDCESGCASNPC----QHGGTCYPQRQPPYYSCRCSPPFW 1407 LNPGKCA-----CEC-----TISEANHTSCROMSKLD-VYROVHSI-----IRRSLPAT-LPQ----CQAANKT----C 239 -----CK---NKLETNSTGANKEED----ENICECVCKR--------CVCKGGLRPSSC------GPH----KELDR---DSCQCV 314 -TENTOKCELEGERE 372 -----1CPRNQP 348 <u>ئ</u> ..



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Minimum DB seq length: 0
Maximum DB seq length: 2000000000
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Maximum Match 100%
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Perfect score:
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

		¢			SUMMARIES	
No.	Score	Query Match	Query Match Length DB		0.11	Description
_	2333	100.0	415	19	AAW75742	Mouse vascular end
к	2328	39.8	415	Ξ	AAWOUSSA	Mouse Flt4 recepto
	2048	н7.8	419	Ξ	AAW17837	Human foetal liver
4	2048	87.8	41'	8	AAW00932	Human Flt4 recepto
'n	2048	87.8	419	19	AAW75740	Human vascular end
, F.	2048	×7.8	419	NO.	AAW86203	Human vascular end
7	2048	87.8	415	t-	AAB10648	Human VEGC protein
x	2048	87.8	419	1.1	AAB29048	Human VEGF-C prote
.,	2048	H7.8	419	21	AAY70744	Human prepro-vascu
10	2048	x 7	414	N	AAY20582	Human vasqular end
	2048	87.8	419	10	AAB37605	Human VEGF C. Hom

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10 25 36	29.6	27.6		29.8		29.8			29.8	k. G	29.8	29.8	13	65.8	67.3	68. D	(T)	71.1	74.9	74.4	76.2	76.4	76.4	76.4	76.4	84.4	87.2		87.4	87.4	87.4	00	87.4
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Mas muscalas vascu	Murine c-Fos induc	Human growth facto	Humat VEGF-D prote	Home sapiens vascu	Human VEGF-D. Hom	Human VEGF-D1 prot	Human vascular end	Human prepro-vascu	Human VEGF-D prote	Human VEGD protein	Human vascular end	Homo sapiens vascu	Himan zveq12 growt	Human VEGF-C trunc	Human VEGF-C trunc	Human VEGF-c trunc	Himan VIOT C trans	Human growth facto	Quail vascular end	quail Fit4 recepto	Vascular endetheli	Human VEGF 2 prote	Truncated vascular	Timedted hadat VE	A truncated vascul	Human VEGF-C full	Human vascular end	Vascular endotheli	Human VEGF-B prote	Vascular endotheli	Full length human	Vascular endotheli	Human vascular end

ALIGNMENTS

AAW75742 standard; Protein; 415 AA.

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Flt4; vascular endothelial growth factor C; vascular endothelial cell; lymphatic endothelial cell; myelopoiesis; andiogeneses; inflammation; lymphanej specesis, redema, elephantiusis, Milroy's discesse.
New isolated vascular endothelial growth factor polypeptide(s) used to develop products for treating, e.g. cancers, inflammation,
                                                                                                                                                                                                                                                                                                                                                     14 (First entry)
                                       WPI, 1998 437470/37.
N-PSDB; AAV52577.
                                                                              Alitalo K, Joukov V;
                                                                                                                                             05-FEB-1997;
                                                                                                                                                                                                                                                   Mus sp.
                                                                                                                                                                                                                                                                                                                             Mouse vascular endothelial growth factor C protein.
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                                                                                                        (LUDW-) LUDWIG INST CANCER RES. (UYHE-) UNIV HELSINKI LICENSING LTD.
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               andiogenesis, for stimulating lymphangiogenesis, treatment or prevention of inflammation, ordema, elephantiasis, or Milroy's disease. They can also be used to modulate myelopoiesis, e.g. treating granulocytopenia. They can also be used for modulating the growth of endothelial cells. They can also be used to stimulate lymphocyte production and maturation, and to promote or inhibit trafficking of leucocytes between tissues and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The vascular endothedial growth factor C (VEGE C) polypeptides have activities affecting growth and migration of vascular endothedial cells, promoting growth of lymphatic endothedial cells and lymphatic vascular permeability, and affecting myolopolesis. The
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        oedema, granulocytopenia or for wound healing or tissue transplantation
13 FEB 1997
                                         Word/Oblin Al
                                                                                                                  andiogenesis; wound healing; Tymph vessel; therapy; diagnosis.
                                                                                                                                          vascular endothelial growth factor receptor=3; ligand;
                                                                                                                                                           VEGE C: Elt4; receptor tyrosine kinase, VEGER 3, moase,
                                                                                                                                                                                                     Mouse Ell4 receptor tyrosine kinase ligand VEGE-C
                                                                                                                                                                                                                                            (Circlestin) 2661 AoN of
                                                                                                                                                                                                                                                                                                                              AAW00933 standard; Protein; 415 AA
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  This polypoptide sequence comprises monse VMSE-C, a novel ligand that binds specifically to the FH4 receptor tyrosine kinase (VESER-4), stimulating phosphorylation of the receptor, and which modulates the growth of endothelial cells. The sequence was deduced from a cNNA clene (ANT84277) obtained from 12 day monse only consecutive and colors.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            embryonal cDNA library, and shows a high degree of homology to novel, claimed human MEGP-C (see AAW0094), and to avian (quail) PUBGF-C (see ABW0094). Recombinant mouse VEGF-C polypoptides can be produced that correspond to non-human mammalian variants of VEGF-C.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    to modulate growth of endothelial cells and for diagnosis of
endothelial cell diseases
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01-AUG-1995;
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                                                                                                                                        (6) NIQEOFLEGKERELING DISCYERPIANELEH INGLISESEFVOROVESYMERPHLN 415
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                                                                                                                                                                                                  415 AA;
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AAW17837;

AAW17837 standard; Protein; 419 AA

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                                                                                                                                                                                                   This polypeptide comprises a human foetal liver kinase I binding protein (tlk lbp) (see AAWT837) that binds to the receptor tyrosine kinase Ilk-le expressed on vascular endothelial and other cells. The mature flk1-bp can be secreted from host cells transformed with an expression vector including an isolated flk-lbp cNA clone (see AAT58811). Flk-lbp can be used to isolate flk-lbp cNA clone (see to use in studying the roles of such cells and or flk-lb or vasculogenesis and angiogenesis. Angiogenesis inhibition or increased vascularisation may be clinically desirable (e.g. to suppress solid tumour growth or in wound healing, respectively). The flk-lbp can be administered to treat conditions with defective or insufficient flk-l. Polypeptides may also act as carriers to deliver diagnostic/therapout in species to cells to which flk-lp binds, to generate antibodies, and to identity flk-lbp unlaqunists or useful for treating flk-lbp mediated conditions.
                                                                                                                   warry Match 87.8%; Score 2048; DB 18; Length 419; Hest Local Similarity 85.4%; Pred. No. 7.9e-151; Matches 409, Conservation 28, Mishatches 29, Indels 4
                                                                                                                                                                                                                                                                                                                                                                                                    Claim 1; Page 30-32; 43pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                          DNA encoding a human foctal liver kinase I binding protein - used to treat conditions with insufficient protein, deliver agents to cells and identity antagenists to treat protein-mediated conditions
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Foetal liver kinase I binding profein; human; tlk-lbp; receptor typesine kinase; risculegenesis, acgiogenesis, wound healing; tumour; therapy; antagonist; antibody.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (IMMV ) IMMUNEX CORP.
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                                                                                                                                                                                 Sequence
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117 SIDMEWEKTROMERIVOIDVOKERGAATNITERKEROVSVYRORGODINSEGIACMNISIGY 176
                         61
                                                                                  | MHILLCELSIACSLIAAALIPSPREAPAIVAAFESGICESEAEPCGGEVKAEEGKOLEEQL | 60
                       RSVSSVIELMSVILLED WEMLECH KNOWE --- UPTINIFICESVEFAAAHYNIEILE 116
                                                                      mhlluttsvärsliaaalipupreapääääaafesgidisdaepdägeatayaskdleegi 60
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                                                                                                                                                                                  419 AA;
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21..419
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28-JUN-1996;
01-AUG-1995;
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9608-0671573.
9508-0510133.
                                   96WO-F100427
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vascular endothelial growth factor receptor=3; ligand;
anglogenesis; wound healing; lymph vessel; lymphangloma;
cancer; metastasis; therapy; diagnosis; antibody; inhibitor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 VEGF-C; Flt4; receptor tyrosine kinase; VEGFR-3; human;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human Flt4 receptor tyrosine kinase ligand VEGF-C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAW00932 standard; Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                177 LSKILFEITVPLSQGPKPVTISFANHFSCRCMSKILIVYFQVHSTIFFSLPATLPOCOAAN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /label- Prepro_peptide 32...227
                                                                                                                                                            /note: "preferred active fragment of VEGF-C,
    retaining Fit4 ligand activity (Claim 11)"
                                                                                                                                                                                                                                                                                                                         /note= "preferred active fragment of VHGF-C, retaining Fit4 ligand activity (Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /note= "preferred active fragment of VEGF-C,
retaining Fit4 ligand activity (Claim
                                                        161...221
                                                                                                         /note-
                                                                                                                                        131..211
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"professed active fragment of VEGF-C, retaining FIL4 ligand activity (Claim B)"
                                                                               "preferred active tragment of VEGF-C, retaining FIt4 ligand activity (Claim 9)"
                                                                                                                                                                                                                                            "proferred active fragment of VEGF-C, retaining Fit4 ligand activity (Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                  "preferred active fragment of VEGF-C
                                                                                                                                                                                                                                                                                                                                                                                                        retaining Flt4 ligand activity (Claim
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Best Local s
AAW/5740 standard; Protein; 419 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EIT4 receptor tyrosine kinase liquid and related medele acid to modulate growth of endothelial cells and for diagnosis of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mouse and quail VEGF C sequences (see AAW00934:35) have also been
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      endothelial function of lymphatic vessels). Inhibitors of VMF ^{\circ}, such as antibodies, can be used to control endothelial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   endothelial cells (e.g. to accelerate angiogenesis and to promote
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              lymphatic vessels, endothelial venules, ELL4 receptor in histochemical tissue) and also to modulate the growth of mammalian
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   elaimed methods for detecting endothelial cells (e.g. to image
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Library. The polypeptide, or its active transments, can be expressed in transformed or transfected host cells for use in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       receptor. Its sequence was deduced from a cDNA clone (AAT84276) obtd. from a PC + prostatic adenocarcinoma cell (ATCC CR. 1435)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        a novel ligand that binds specifically to buman EH4 receptor tyrosine kinase (VEGER 4), stimulating phosphorylation of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         this polypeptide comprises the pre-pro-sequence of human VEGE-C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 7; Page 112 113; 183pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           endothelial cell diseases
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14 FEB 1996;
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                                                                                                                                                                                                                                      (*) PETENDOPES ES SE BROGES STRBERS ANGLARIENDS BESTEAD DO OVES YMERPHEN 415
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Y Match 87.8%; Score 2048; D8.18; Length 419; Local Similarity 85.4%; Pred. No. 7.9e-151; hds 43; Mismatches 29; Indels 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61 RSVSSVDELMSVLYTDYWKMYKCOLKKODWO --- OPTLNTRTGDSVKFAAAHYNTELLK 116
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                                                                                                                                                                                                                                                                                                                                                                                                        | PSS/2GERKELDRIS/2/CYCKNKLEPNS/2ANREEDENT/2/2/CYCKRT/2FRNQPLNPGK/AC 356
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       414 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                Bost
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          They can also be used for modulating the growth of endothelial cells. They can also be used to stimulate lymphocyte production and maturation and to promote or inhibit trafficking of leucocytes between tissues and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            angiogenesis, for stimulating lymphangiogenesis, treatment of prevention of inflammation, oedema, elephantiasis, or Milroy's disease. They can also be used to modulate myelopolesis, e.g. treating granulocytopenia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         activities affecting growth and migration of vascular endothelial cells, promoting growth of lymphatic endothelial cells and lymphatic vessels, increasing vascular permeability, and affecting myolopoissis. The products can be used for stimulating angiogeneses, for inhibiting
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 1; Page 112-115; 177pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FIL4; vascular endothelial growth factor C; vascular endothelial cell; hymphatic endothelial cell; hyelopoiesis; andiogeneses; inflammation; lymphangiogenesis; oedema; elephantiasis; Milroy's disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The vascular endothelial growth factor C (VEGF-C) polypoptides have
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     oedema, granulocytopenia or tor wound healing or tissue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New isolated vascular endothelial growth factor polypeptide(s) used to develop products for freating, e.g. cancers, inflammation,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           N-PSDB; AAV52576.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human vascular endothelial growth factor C protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAW75740;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          lymphatic vessels or to affect migration in and out of the thymus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (LUDW-) LUDWIG INST CANCER RES
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237 KTCPTNYVWNNYMCRCLAQQDFTFYSNVEIDSTNGFHDVCGPNKELDEDTCQCVCKGGLR 296
                                      181 lektiteitypisgapkpytistanhtscromskldvýraphsiirrsipatlpacaaan 240
                                                                                                                                                                                                                                                                                                                                                                                                         y Match 87.8%; Score 2048; DE 19; Length 419; Leeal Similarity 85.4%; Pred. No. 7.9e-151;
                                                                                                                                                                                                             61 rsvssydelmtvlypeywkmykoqirkaqwqtmreqaninsrteetikiaaabysteiik 120
                                                                                                                                                                                                                                                           61 RSVSSVDELMSVLYPDYWKMYKOQLRKGGWQ----QPTLNTRTGDSVKEAAAHYNTEILK 116
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                                                             LSKILFETTVPLSGGFKPVT1SFANHTSCRCMSKLDVYRQVHST1RKSLPA1LFQCQAAN 2-6.
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                                                                                                                                                                                                                                                                                                                        419 AA;
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                                                                                                                                                            acids encoding the truncated VRP submits are used to produce the trincated proteins recombinantly. The truncated VRP submits, optionally expressed from the rappy vectors, have in vivo and in vitro angiogenic activity and are used to stimulate ancioquenesis, particularly coronary collateral vessel development in cases of cardiac isoharmia; to stimulate endothelial cell growth and migration in vitro; to treat heart disease; to treat ischarmia (e.g.cardiac, chronic coronary or chronic lower limb ischarmia (struke and peripheral vascular disease); to promote healing of
                                                                                                                                                                                                                                                                                                                                           This represents the amino acid sequence of human vascular endothelial growth factor (VEGF)-C protein. The invention provides fruncated VPP (VEGF-related protein) subunits that have at least one amino acid N-terminal to the first cys of the core sequence deleted. Host colls
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         recombinant: truncated; done therapy angiogenesis; cardiae ischaemia; coronary; colluteral vessel development, cell drowth; migration; heart; lower limb ischaemia; stroke; peripheral vascular disease; intestine;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human vascular endothelial growth factor (VEGF) -C sequence.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New truncated vascular endothelial growth factor-related protein subunits. Luck part of the W terminal sequence, used to stimulate
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                                                                                                        Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        wound healing: skin; vascular permeability.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  VEGF; VEP; vascular endothelial growth factor; VEGF-related protein;
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      Conservative
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87.8%; Score 2048; DB 20;
85.4%; Pred. No. 7.9e-151;
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VEGET: vascular endothelial growth factor; human; uninerary; cytostatic; antifreumatic; antifreumatic; treatment; antipsoriatic; antifection tredulation; vasculation requiator, vascularization tequiator, vascularization tequiator, vascularization; rheumatoid arthritis; diabetic retinopathy; blood vessel; organ repair; tissue regeneration; tissue repair; wound; dermal ulcer; pressure sore; tissue regeneration; tissue repair; wound; dermal ulcer; pressure sore;
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Homo sapiens
                                                                                                           venous sore; diabetic ulcer; burns; skin graft growth; VEG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human VEGC protein
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29-JUN-2000

21-DFC-1999; 99MO-0830203

08-NOV-1999; 22-DEC-1998; 18-MAR-1999; 9908-0164131. 9908-0124967 98CB-0028377

(JANC) JANSSEN PHARM NV

Dhanaraj SN, You TK, Dijkmans JIH. Gosjowska

New vascular endothelial growth factor protein, useful for treating or preventing diseases associated with inappropriate anglogenesis activity as cancer, rheumatoid arthritis, psoriasis and wounds

Disclosure; Fig 11; 127pp; English.

This invention describes a novel vascular endothelial growth hactor X (VEGF-X) protein (1a) and its encoding polymorlevoide (1ia) which has vulnerary, cytostatic, antirheumatic, antiarthritic, antipsoriatic and antidiabetic activity and acts as an angiogenesis and vascularization

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                                                                                                                                                                                                                                                           W 1158500029M
                                                                                                                                                                                                                                                                                                                                                                                                                            Milroy Nonne Syndromes Tymphoedema praecox; VEGF C; vascular endothellal growth factor C_{\infty}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human; Elt4; Ims like tyrosine kinase 4; lymphoedema;
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26 MAR 1999;
                                                                                     26. MAR 1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human VEGE C protein sequence.
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34 1905 OMG.
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RESULI AAY70749

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AAY70749 standard; Protein; 419 AA

Human prepro-vascular endothelial growth tactor C.

AAY70749; 17-AUG-2000

(first entry)

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Best Local s
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      also known as FIT4 or this like tyrosine kinase 4) alleles they possess and this their likelihood of developing hereditary lymphoedema. Conditions associated with lymphoedema include Milroy Nonne syndrome.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The present sequence is the protein sequence for the buman vascular endothelial growth factor C (PRGF C). It was used to demonstrate the methods of the invention, which involve the screening of individuals to determine which vascular endothelial growth factor receptor 3 (PESFR 5).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Screening a homan subject for increased risk of developing a lymphatic disorder, comprises assaying a nucleic acid to determine a mutation altering the sequence of a vascular endothelial growth factor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Disclosure: Page 60-61; 76pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (LUDW') LUDWIG INST CANCER RES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     which is early onset lymphoedema and lymphoedema praecox, which is
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237
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Match 87.8%, Score 2048, 18 21; Length 419; Local Similarity 85.4%; Pred. No. 7.9e-151;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         l mirrigitsvaesilaaalipapreapaaaaatesgidisdaepdageatayaskdleegl 60
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          28, Mismateles
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Human: receptor tyrosine kinase; RTK; flt4; fms like tyrosine kinase 4; VESFP-4; vascular endethelial growth factor receptor-3; chromosome 5q35; cytostatic; tumour imaging anti-tumour thorapy; treatment; diagnosis; nephlastic disease, lymphoma, edicheda, breast, squameas celi, meianomas malignancy; VEGP-C; vascular endothelial growth factor C.
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Binding-site
                                                                                                                                                                                                                                                                                                                  Protein
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                                                                         Professional Patter of Special Cylinder to Sides Profession to a Balbiani ring 3 protein (BRP) Sequence: cleavage of sixed peptide and the Office BRP peptide produces a partially processed form of VEGF-C of about 29 kB which has high iffinity to Fit4 (VEGFE-3).
                                                                                                                                                                                                                                                                                                                                                                 /mote= "cleavage of this peptide from partially processed VEGF-C produces a fully processed mature form of VEGF-C
Association 156 is essential for VEGER-2 binding and at
                                                                                                                                                                                                                                                                                 /label- Mature_VEGE-C
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1..31
                                                                                                                                                                                                                                                                                                                                   21-23 kD which has high affinity to VEGER-2"
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X121 100

165 is essential for VEGER-2 and VEGER-3 binding*
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"important for VERF C antisity"

20-APR-2000

W-290621569-AL

UB-UKT-1999; 99W0-0823525

(LUDW-) LUDWIG INST CANCER RES (UYHE-) UNIV HELSINKI LICENSING LTD OY.

Alitalo K. Kaipainen A, Valitola R. Jussila

binding of ligand proteins to ims like tyrosine kinase 4 receptor Treating neoplastic diseases such as lymphoma, carcinomas, melanomas and surcomas, involves administering a compound capable of inhibiting

Example 15-17; Page 140-142; 148pp; English

tor manufacturing medicament useful for diagnostic screening, imaging and treatment of mallumancies characterised by FIT4-expressing blood cells. The FIT4 gene maps to chromosomal region 5q35 and is expressed as 5.8 kb and 4.5 kb mRNAs which differ in their 3' sequences and are differentially expressed in HEL and DAMI cell lines. FIT4 belongs to a subtamily of class III receptor tyrosine kinases (RTKs). It is used as a target for tumour imaging and anti-tumour therapy. The present sequence is a human prepro-vascular endothelial growth tactor C (VECF-C), a specific example of FIT4 binding compound. endothelial cells. The compound is useful for froating neoplastic disease such as breast carcinomas, squamous cell carcinomas, lymphomas, melanomas and sarcomas. Fir4 receptor tyrosine kinase binding compounds can be used The patent discloses a method to treat neoplastic disease characterised by expression of the like bytesine kinase 4 (EL4) receptor (also referred as vascular end-th-lila growth lactor receptor 3. VECEP-3) in endothelial cells of blood vessels adjacent to malignant neoplasm. The method involves administering a compound that inhibits binding of a ligand to Flt4 thereby labibiting flt4 mediated proliferation of vascular

Binding-site

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Best Local Similarity
                                                                 Binding-site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 vascular endothelial growth factor receptor, VEGFR, vascular trauma; blood vessel; cardiovascular surgery; anti-restenosis agent; prevention; restenosis, stemosis, percutaneous transluminal coronary andioplasty.
                                                                                                                                                                                                                                                                                 Binding-site
                                                                                                                                                                                                                                                                                                                                                                                       Protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Peptide
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human vascular endothelial growth factor (VEGF)-C protein
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137
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                                                                     /note-
156
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131...2
                                                                                                                                                                                                                                                                                                                                                                                       /motes "Cleavage results in fully-processed mature
VEGF-C protein (21-23 kD)"
104..227
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          protein (29 kD)"
32..103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /label= Signal_peptide
/mote *Cleargage results in partially processed VEGF-C
                                                                                                                                                                                                                                                                                                                                                  /label= Mature_human_VEGF_C
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සිටි. 4 ම ;
                                    "Essential for VEGFR-2 binding"
                                                                                                                                                                                                                                            "Essential for VECFR-2 and VECFR-3 binding"
                                                                                                         "Essential for VEGFR-2 and VEGFR-3 binding"
                                                                                                                                                                                                                                                                                                       "Processed vascular epithelial growth factor-C"
                                                                                                                                                                           "Essential for biological activity of protein"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Amino_terminal_peptide
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        used in a method to reduce or prevent restenosis and stenosis of a blood worsel following gasoular transma e.g., cardiovascular surgery and percurianceous transforminal cotomary anglophasty.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VEHER 4 phosphorylation in cells that express such receptors. An anti-restenosis agent comprising either a VEHE-C gene or protein is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 re endothelialisation of an injured blood vessel, without significant stimulation of smooth muscle cell proliferation. It can bind to and stimulate VEER 2 (vascular endothelial growth factor receptor) and/or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The present amino acid sequence is the complete human prepro-vascular endothelial growth factor (VERE)-C. VERE-C has the ability to stimulate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Preventing stemosis and restemosis in mammals using vascular endothelial growth tactor proteins or the nucleic acids encoding them
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2.37 KTOTEINYVWNNYMOROLAGGDETEYSNVEIDSTNGEHDVOGDNKELDEDEGGOVOKGGLE 296
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thl echespakellkakkihbateseyirpetniakacepaisyseevereepsywkipams 419
                                                                                                             357 ECTENTOKOFILKOKKEHHOTOSOYRREGANRIKHODEGI.SESEEVOROVESYWKREHIN 415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  117 STUNEWRKTQCMPREVCTOVGKEFGAATNTFFKPPCVSVYRCGGCCNSEGLQCMNTSTGY 176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61 rsvssyletintvlypeywengkejtrkggwijhnrespinlinsitvettiktaaahgiitvilk 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61 RSVSSVDELMSVLYFDYWKMYKCQLKKGGWQ----QPILNIKIGDSVKFAAAHYNTELLX 115
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    puscaphkeldruscapsvekukltpsacaanreidentegevekrispruaplupgkeäe 360
                                                                                                                                                                                                                                                                                    ESSAGRIK FILIKASA WAYAKIKI ETRISA GANREETIKNI AVAZKITARINDI HILIHI HILIH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TO SECTION OF SECTION OF A SECTION AND SECTION AND TAKEN OF SECTION OF SECTIO
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                9805 0105587
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/mate "Cleavage results in partially_processed VEGE-C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   "Essential for VEGER-2 and VEGER-3 binding"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Jeltsch MM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Achen MG
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Conservative

Mismatches

4 SdPg

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AAB37605
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                                    Query Match
                  Best Local Similarity
                                                                                                                                                                        AAM37504) and determining an increased risk of developing lymphatic disorder from presence or absence of the mutation. The presence of a mutation aftering the encoded amino acid sequence or expression of at least. I VEGER-3 allele in the nucleic acid correlates with an increased risk of accomplish a lymphatic disorder. Treatment for baredifary lymphedoema can be provided through the administration of vascular endothelial growth factor C (VEGEC) and vascular endothelial growth factor C (VEGEC) and vascular endothelial growth factor.
                                                                                                                                  factor D VEGF-D denes (via dene therapy) and proteins. The present sequence is the protein sequence for VEGF-C.
                                                                                                                                                                                                                                                                                                            sequence or expression of vascular endothelial growth factor receptor-3 (VEGFR-3)/ims-like tyrosine kinase 4 (FIT4) allele (see AAC68952 and
                                                                                                                                                                                                                                                                                                                                                                 The present invention relates to a method for screening a human subject for an increased risk of developing a lymphatic disorder e.g. hereditan lymphatisms. The method comprises assaying succeic acid of a human
                                                                                                                                                                                                                                                                                                                                                                                                                                                bischosure; Pages 62-63; 99pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Screening a human for an increased risk of developing lymphatic disorder comprises assaying nucleic acid for alterations in the sequences expressing vascular endothelial growth factor receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Alitalo K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CA2283470-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human; gene therapy; lymphafic disorder; hereditary lymphedoema; Flt4; vascular endothelial growth factor receptor-3; VEGFR 3; VEGF-C; VEGF b;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAB 37605;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAB47605 standard; Protein; 419 AA
                                                                                               Sequence
                                                                                                                                                                                                                                                                                                                                                   subject to determine a presence or an absence of a mutation aftering the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  N-PSDB: AAC68954
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (UYHE+) UNIV HELSINKI LICENSING LID OY.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (UYPI-) UNIV PITTSBURGH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               26-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    29 · SEP - 1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    tms-like tyrosine kinase 4.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2001-007762/02
                                                                                                   419 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ferrell RE,
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                  87.8%; Score 2048; DB 22; Length 419; 85.4%; Pred. No. 7.9e-151;
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RESULT 12
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the phosphorylation of, the receptor tyrosine kinase Fit4. It is postulated to be a third member of the VEGF protein family. Its amino acid sequence was deduced from a cDNA clone (AAT59929) obtd
                                                                                               A human vascular endothelial growth factor (VEGF)-related protein (VEP) (AAWI 888) has been identified that binds to, and stimulates
                                                                                                                                                                                                                                                                                            Buman protein similar to vascular endothelial growth factor to treat e.g. wounds, tumours, rhoumatoid arthritis, Kaposi's
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  receptor protein tyrosine kinase; Flt4; signal transduction; would bealing; vilocrary: rhoumathid architis, Kaposi's surcepu:
                                                                                                                                                                                               Claim 6; Fiq lA-D: 68pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                   N-PSDB: AAI59929
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (GETH ) GENERITECH INC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human vascular end-thelial growth tactor-related protein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1..20
/label= Siq_peptide
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches 357;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       with excessive neovascularisation or vascular permeability, may make it possible to avoid coronary by-pass surgery by stimulating growth of the collateral circulation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   from a glicona SKI library. Ecosobinant VKF can be produced in transformed host cells and used; to promote growth of vascular and lymph calculations cells to stimulate phosphorplation at the tyrosine kinase domain of a Fif4 receptor; as a diagnostic; as an additive to cell cultures, to stress for (act) agents stand to additive to cell cultures, to stress for (act) agents stand to
                                                                                                                                                   leukocyte adhesion deficiency syndrome; lymphopenia; phagocyte bactericidal dysfunction; severe combined immunodeficiency; Wiskott-Aldrich disorder; anomia; thrombocytoponia; homodobinuria;
                                                                                                                                                                                                             andiogenesis; blood pressure; blood flow; immune system disorder; immune eall, carear; autoimmune disorder; blood protein disorder; ataxia telandicetasta; common variable immunodaticiency; pigeorge syndrome; HIV intection; HIIV-BIV intection;
                                                                                                                                                                                                                                                                                         Human vascular endothelial growth factor-2; VEGF 2; vascular endothelial cell growth; endothelial cell migration;
                                                                                                                                   allergy; asthma; allergic asthma.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAY30518 Standard; Protein; 419 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
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                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                  Vascular endothelial growth factor 2 (VEGF 2).
                                                                                                                                                                                                                                                                                                                                                                                         16-NOV-1999 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ktcptnymwnnhicrclagedimfssdagddstdgfhdicgpnkeldeetcgcvcraqir 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  419 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                87.4%; Score 2039; DB 1
85.2%; Pred. No. 4e-150;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       28; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The present sequence represents vascular endothedial growth tactor-2 (MSEF 2). The MSEE 2 polypoptides have activities similar to MSEE The MSEE 2 polypoptides have activities as initial cells, stimulate the growth of vascular endothelial cells, stimulate endothelial cell migration, stimulate angiogenesis, decrease stimulate endothelial cell migration, stimulate angiogenesis, decrease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             protein disorders, ataxia telangicetasia, common variable numburodeficiency, Discorde syndrome, HIV intection, HTLV-BLV intection
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            polypeptides can be used for preventing, treating or ameliorating a medical condition. The VEXE 2 polypeptides or polynacicotides may be
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 blood pressure, and increase blood flow. The polynucleotides and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 12; Fig 1A:E; 222pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Rosen CA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarly affergic reactions and conditions such as asthma (particularly affergre asthma) or other respiratory problems, may also be treated.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    bartericidal dystruction, severe combined immunodeficiency (SCIDs),
Wiskert Aldrich disorder, anemia, thrombecytopenia, or hemoglobingria.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  references. Examples of immunologic deficiency syndromes include blood
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    useful in treating deficiencies or disorders of the immune system,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        =
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (HUMA ) HUMAN GENOME SCI INC
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361 ectespekellkekkthligteseyripetniqkacepqisyseeverevpsywgrpqms 419
                                                                                         857 STENDOMORTE FEESHOUSTENDE ANALEHOSHOLSESELVORGVESYWKRDILM 415
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                                                                                                                                                                         pascaphkeldrusegezekukltpsgeganretdentegezekrteprngplupgkeae
                                                                                                                                                                                                                 PERSONEHIKTELERGES WITVERIKELE PREGGANKELTELHTÖLTET HELLET                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            lskilteityplsipppkpyristanhiseremskldvyrgyhsiirrslpatlpspspaan
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Similarity 85.0%; Prod. No. 4.7e-150;
56; Conservative 29; Mismatches 30; Indels 4
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               This sequence is the vascular endothelial growth factor 2 (VEGFZ), of the invention. The isolated polypoptide is useful for stimulating angiosenessis, by promoting the proliferation of endothelial cells, for the treatment of a wound, or for the treatment of tissue of bone damage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VEGF2: vascular endothelial growth tactor 2; anglogenesis; bone damage;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Full length human VEGF2 protein sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAY22320;
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                                                                                                  241 kteptnymwnnhierelagedfmfssdagddstdgthdiegpukeldestegeveragtr
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61 rsvssydelmtylypegwkmykeglikddwghnicganlmsiteetiklaaabguteilk
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1.477
                                                                                                                                                                                                                                                                              Hu J,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
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Best Local 5
                                                                                                                                                                                          Matches 356;
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                                                                                                                                                                                                                                                                                                                              to a patient can be used for treating injury or degeneration of
photoreceptors associated with e.g. angloid streaks, retinitis
pigmentosa, age-related macular degeneration, diabetic retinopathy,
                                                                                                                                                                                                                                                                                                                                                                                                            Claim 31; Fig la-e; 252pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Treating injury or degeneration of photoreceptors comprises administering to a subject vascular endothelial growth factor 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 03-JUN-1999;
22-DEC-1999;
                                                                                                                                                                                                                                                                      Sectional
                                                                                                                                                                                                                                                                                                     vessels in the retina.
                                                                                                                                                                                                                                                                                                                                                                             Administration of vascular endothelial growth factor 2 (VEGF-2)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          N-PSDB; AAA52080.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (HUMA-) HUMAN GENOME SCI INC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    age-related macular degeneration; diabetic retinopathy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Vascular ondotholial growth tactor-2 (VETP-2)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             22-560-2000 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAY97144 standard; Protein/ 419 AA.
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                                                                                                                                                                                                   Match 87.4%: Score 2038; DB 21; Local Similarity 85.0%; Pred. No. 4.7e-150;
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                                                                                                                                           MHLLCFLSLACSLLAAALIPSPREAPAIVAAFESGIGFSEAFPDG3FVKAEEGKDLEEGL 60
sidnewrktgempressidoakeigvatuttikppovsvyroggeonseglgemntstsy 180
                               SIDNEWRKIQCMPREVCIDVGKEFGAAINIFFKPPCVSVYRCGGCCNSECLQCMNISIGY 176
                                                              rsvssidelmtiljpeywkmykeqlikqgwqhareqanlnsiteetikfaaahynteilk 120
                                                                                           RSVSSVDELMSVLYPDYWKMYKOWIEKGAWW----WETLNTKIGDSVKFAAABYNIEILK 115
                                                                                                                                                                                                                                                                                                                VEGF-2 promotes anglogenesis, the formation of new blood
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2000-532862/48.
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                  Conservutive
                                                                                                                                                                                                                                                                       419 AA;
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                                                                                                                                                                                          29;
                                                                                                                                                                                          Mismatches
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                                              FOTENTIANDE SOMETHIQUOS CYMPPOANELKHOUPSLISESEEVOROVESYWERPHIN 415
                                                                                      pascaphkeldrascaevekaklipsacameldenteaevekrtepraaplapakeae 360
                                                                                                                                PSSCGPBKF1 DEUSCHOVCENEI EPNSCSANBEFDENTODIOVERT CPPNUPLNPGKCAG, 356
                                                                                                                                                                        ktcptnymwnnhicrclagedimissdayddstdqihdicypnkeldeetcqcvcraqlr 300
                                                                                                                                                                                                                                                       lsktlfeitvplsggpkpvtisfanhtseremskldvyrgvhsiirrsfpatlpsgegaan 240
                                                                                                                                                                                                                  KTCPTNYVMNYMCRCLAQQDETFYSNVEDDSTNGFHDVCGPNKELDEDFOQCVCKGGLR 296
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